

THE LEPIDOPTERA OF PORTUGAL

BY ALBERT ZERKOWITZ

(Concluded from Vol. LIV, No. 2, p. 165)

723. *Hemerophila nycthemeraria* Hbn.—Western Mediterranean.—Alg: São Marcos da Serra. Only one specimen, captured by Eaton and recorded by Staudinger (1880–1881, Entom. Monthly Mag., 17, p. 184). Algarve is one of the least known districts of Portugal, where only very few collectors have ever been.

724. *Synopsisia sociaria* Hbn.—Euroriental.—E: Setúbal. May.

725. *Boarmia occitanaria* Dup.—Western Mediterranean.—BB: S. Fiel. September–October.—E: Setúbal. October–November.

726. *Boarmia rhomboidaria* Schiff.—Euroriental.—M: Caldelas. August. Gerez. May. Vizela. May–June. October.—Alg: Picota, near Monchique. May.

727. *Boarmia manuelaria huebneri* Prout. (*ilicaria* Hbn. G.).—Western Mediterranean.—BB: S. Fiel. May–June; September.—E: Setúbal. May; September–October. Torres Vedras. May–June.

728. *Boarmia umbraria* Hbn.—Mediterranean.—M: Gerez. May. Vizela. May.—BB: S. Fiel. June.

729. *Boarmia lichenaria* Hufn.—Euroriental.—M: Vizela. June.

730. *Boarmia atlanticaria* Stgr.—Iberian.—E: Setúbal. May–June.

731. *Boarmia punctinalis* Scop. (*consortaria* F.).—Euroriental.—M: Caldelas. August. Gerez. Guimarães. Vizela. May–June. August.

732. *Tephronia cremiaria* Frr.—Mediterranean.—M: Caldelas. August. Rare.—BB: Covilhã. August.

733. *Mannia oranaria castiliaria* Stgr.—Western Mediterranean.—BB: S. Fiel.

734. *Pachynemia hippocastanaria* Hbn.—European.—M: Caldelas. July–August. Gerez. May. Vizela. June. August.

October.—BB: S. Fiel. April–May; October–November.—E: Setúbal. May; October–November. Sintra. April. Torres Vedras. March. May–June. Val de Rosal. April.

735. *Rhoptria asperaria* Hbn.—Mediterranean.—M: Caldelas. June. August. Gerez. Guimarães. Vizela. June. August.—BB: Serra da Guardunha. September.—E: Setúbal. April–June. Sintra. April. Rather common. Val de Rosal. April.—f. *pityata* Rbr.—M: Gerez.—BB: Ponte de Morcellos. June. Serra da Guardunha. May.—E: Val de Rosal. April.

736. *Gnophos stevenaria* Bsd.—Ponto-Mediterranean.—M: Gerez.—BB: S. Fiel. April–May.

737. *Gnophos perspersata* Tr. (*respersaria* Hbn.).—Western Mediterranean.—BB: Portas do Ródam. Middle of May.—Alg: Silves. May.

738. *Gnophos obscurata* Schiff.—Euroriental.—M: Gerez.—BB: Matta do Fundão. September.

739. *Gnophos onustaria* H.S.—Mediterranean.—M: Gerez. August. Vizela. May.—BB: S. Fiel. April–May; September.—E: Setúbal. March–May.—f. *serraria* Guen.—BB: S. Fiel. April–May; September.—Larva from May–end of July; September–end of April.—Foodplants: *Polygonum aviculare* L. and *Rumex acetosella* L.

740. *Gnophos variegata* Dup.—Mediterranean.—M: Gerez. May. August. Vizela. June.—E: Torres Vedras. March.

741. *Gnophos mucidaria* Hbn.—Western Mediterranean.—M: Caldelas. July–September. Common. Guimarães. April. June. Vizela. May–June. August. Abundant.—BB: S. Fiel. February–March; May–June; October–November. Very common.—E: Setúbal. May. Sintra. April. Torres Vedras. October.—Foodplant: *Linaria* sp.—f. *grisearia* Stgr.—BB: S. Fiel. March–April; November.—f. *lusitanica* Mendes (1903, Brotéria, 2, p. 67; 1909, Brotéria, Série zoológica, 8, p. 71, pl. 12, figs. 21, 22, 23).—BB: S. Fiel (type locality). March–April; November.—f. *ochracearia* Stgr.—BB: S. Fiel.

742. *Gnophos tibiaria* Rbr.—Western Mediterranean.—BB: Serra da Guardunha. September.

743. *Gnophos myrtillata obfuscaria* Hbn.—Boreo-Alpine.—BB: Serra da Estrêla. 1700 m. August.

744. *Bichroma famula* Esp.—European.—M: Gerez. May.—BB: Ceia. June. S. Fiel. April. Very common.—Larva end of May. Foodplant: *Sarothamnus patens* Webb.

745. *Fidonia pennigeraria* Hbn.—Western Mediterranean.—M: Gerez. Salamonde. June.—BB: Senhora da Orada. May–June. Serra da Estrêla. 1000 m. July.—Larva in March–April.—Foodplant: *Halimium occidentale* W.

746. *Fidonia plummistaria* Vill.—Western Mediterranean.—M: Gerez. May.—BB: Serra da Guardunha. March–April.—E: Sintra. April. Common.—f. *albosignata* Neuburger.—BB: Serra da Guardunha.

747. *Ematurga atomaria* L.—Euro-oriental.—M: Caldelas. August. Gerez. Common. Vizela. May.—E: Santa Cruz. April.—f. *ochrearia* Rbl.—M: Caldelas. July.

748. *Selidosema plumaria* Schiff. (*ericetaria* Vill.).—Euro-oriental.—M: Gerez.—BB: Serra da Estrêla, 1000 m. August–early September. Serra da Guardunha, 900–1000 m. September.—f. *pyraenæaria* Bsd. and f. *pallidaria* Stgr.—BB: Serra da Estrêla.—f. *oliveirata* Mab.—BB: Serra da Estrêla, Serra da Guardunha.

749. *Selidosema taniolaria* Hbn.—Western Mediterranean.—BB: S. Fiel. August–September. Serra da Estrêla. Serra da Guardunha.

750. *Itame vincularia* Hbn.—Western Mediterranean.—BB: Ponte de Morcellos. June. Serra da Estrêla. August.—E: Setúbal. March–October. Very common. Torres Vedras. April–June.

751. *Itame gesticularia* Hbn.—Western Mediterranean.—BB: S. Fiel. March. May.—E: Sintra. April.—Ale: Almodóvar. Early May.—Larva in May–July. Foodplant: *Quercus ilex* L.

752. *Diastictis artesiaris* Schiff.—Euro-Pacific.—BB: S. Fiel.

753. *Lithina chlorosata* Scop. (*petraria* Hbn.).—Euro-Pacific.—M: Gerez.—E: Sintra. April. Common.

754. *Lithina convergata* Vill. (*scutularia* Dup.).—Western Mediterranean.—BB: S. Fiel. October.—E: Setúbal. November.

755. *Lithina partitaria* Hbn.—Western Mediterranean.—E: Setúbal. October.

756. *Chiasma clathrata* L. and f. *cingularia* Hbn.—Euro-Pacific.—E: Setúbal. March–April.

757. *Enconista miniosaria* Dup.—Western Mediterranean.—M: Gerez. September. Vizela. October.—BB: Serra da Guardunha. End of September—early October.—E: Torres Vedras.—Larva in March—May. Foodplants: *Cytisus albus* Lk., *Sarothamnus patens* Webb and *Genista tridentata*.—f. *duponcheli* Prout (*perspersaria* Dup.).—BB: Serra da Guardunha. End of September—early October.—J. de Joannis gave an interesting account of the variability of this species from the above locality. (1900, Bull. Soc. Entom. France, p. 189–191, figs. 1–4).

758. *Enconista oberthueri* Vazquez (1905, Bol. de la Real Soc. Esp. de Hist. Nat., 5, p. 119, pl. 1, fig. 3).—Iberian.—BB: S. Fiel.—f. *inclarata* Joann. (1912, Brotéria, Série zoológica, 10, p. 26).—BB: Quinta de S. Fiel. September. Serra da Guardunha. Up to 1000 m.

759. *Enconista agaritharia* Dardoin.—Western Mediterranean.—BB: Serra da Guardunha. Middle of October. Recorded only by Mendes, who writes that this species is very rare. He found only two specimens.

760. *Dyscia penulataria* Hbn. (*rubentaria* Rbr.).—Western Mediterranean.—M: Gerez.—BB: S. Fiel. October.—E: Setúbal. March—April. Identified by J. de Joannis.

761. *Scodiona lentiscaria distinctaria* Bang-Haas (1910, Iris, p. 49).—Western Mediterranean.—M: Gerez.—BB: S. Fiel. Late March—early April.—E: Setúbal.—Larva from May—March.—Foodplants: *Helianthemum guttatum*, *Cytisus ledon* Lam. and *Cytisus albus* Lk.

762. *Aspilates ochrearia* Rossi.—Euroriental.—M: Vizela. May—June.—BB: S. Fiel. April—May; September. Serra da Guardunha, 900 m. September.—E: Campolide. Oeiras. May. Santa Cruz. April. Setúbal. March. September. Sintra. April.—Ale: Almodóvar. May.—Alg: Picota near Monchique. May.—f. *unicolorata* Seeb.—E: Setúbal. March. September.—f. *astiva* Schawerda.—E: Oeiras. June.

763. *Compsoptera opacaria* Hbn.—Western Mediterranean.—M: Gerez.—E: Torres Vedras. January.—Larva in April. Foodplant: *Cytisus albus* Lk.—f. *rubra* Stgr.—BB: S. Fiel. September—October.

764. *Compsoptera jourdanaria* Vill.—Western Mediterranean.—BB: S. Fiel. September—October. Serra da Guardunha.

765. *Chemerina caliginaria* Rbr.—Western Mediterranean.—BB: S. Fiel. January. March–April.—E: Setúbal. March. Torres Vedras. January–March. At light.

DREPANIDÆ

766. *Drepana curvatula* Borkh.—Euro-Pacific.—M: Caldelas. June–July. Rare. Gerez. Rare. Vizela. May. August. Only two specimens.

767. *Drepana binaria* Hufn.—Euroriental.—M: Caldelas. July–August. Rare. Gerez. By day, rare.—BB: S. Fiel. April. June; August.—E: Setúbal. July–August. Sintra. April. Common at light. Torres Vedras. October.—f. *uncinula* Bkh.—M: Vizela. May–June. August. October.

768. *Cilix glaucata* Scop.—Euro-Pacific.—M: Gerez. Rare, by day. Vizela. May. Rare.—BB: S. Fiel. April–June; August.—E: Setúbal. May.

CYMATOPHORIDÆ

769. *Thyatira batis* L.—Euro-Pacific.—M: Caldelas. July–August. Vizela. May–June.—E: Sintra. April. Rare.

770. *Cymatophora ocularis* L. (*octogesima* Hbn.)—Euro-Pacific.—M: Caldelas. July. Vizela. May–June. Rare.—BB: S. Fiel. Only one specimen.

771. *Polyploca diluta* F.—Euroriental.—E: Campolide.

LASIOCAMPIDÆ

772. *Chondrostega vandاليا* Mill.—Iberian.—BB: S. Fiel. August–September. Serra da Guardunha.—Larva in October–April. Never found below 800 m. Foodplants: *Nardus stricta*, *Hypochaeris radicata*, *Authoxanthum aristatum* Bois. and *Festuca (Vulpia) myuros* Gm.

773. *Malocosoma neustria* L.—Euro-Pacific.—M: Gerez. Rare.—BB: S. Fiel. June.—f. *flavescens* Grünberg.—M: Gerez. Rare.

774. *Trichiura ilicis* Rbr.—Iberian.—E: Sintra. April. Only one female.

775. *Lasiocampa quercus* L.—Euroriental.—M: Caldelas. August. Common. Gerez. Common, by day. Vizela. August.

Only one specimen.—BB: Covilhã. August.—E: Torres Vedras. August.—f. *catalaunica* Stgr.—M: Guimarães.

776. *Lasiocampa trifolii* Esp.—Euroriental.—M: Caldelas. September. Gerez. Frequent, at light. Vizela. August–September.—BB: S. Fiel. August–September.—Larva in March–April. Pupation end of April. Foodplant: *Cytisus albus* Lk.—f. *iberica* Guen.—BB: S. Fiel.—f. *ratama* H.S.—BB: S. Fiel.—E: Torres Vedras.

777. *Macrothylaciaraubi* L.—Euroriental.—M: Caldelas. June. Gerez. Abundant, by day. Vizela. June. Only one specimen.—E: Sintra. Torres Vedras. June.—Larva early April.—f. *digamma* Meade-Waldo.—E: Sintra. April.

778. *Diplura loti* O.—Western Mediterranean.—M: Gerez. Rare, at light. Vizela. June. August.—BB: Covilhã. August. S. Fiel. May; August–September. Vale de Prazeres and Alcaide near Matta do Fundão.—E: Setúbal. July.—Larva in April; end of July–early August, the second brood being less common.

779. *Epicnaptera ilicifolia* L.—Euro-Pacific.—M: Gerez. Rare.

780. *Epicnaptera tremulifolia* Hbn.—Euroriental.—M: Caldelas. July. Common.

781. *Epicnaptera suberifolia* Dup.—Western Mediterranean.—M: Caldelas. August.—BB: Sobral do Campo. October.—E: Lourigal.

782. *Odonestis pruni prunoides* Stgr.—Euroriental.—M: Caldelas. September. Only one specimen.

THAUMETOPŒIDÆ

783. *Thaumetopœa processionea* L.—European.—BB: Covilhã. August.—E: Setúbal. August.

784. *Thaumetopœa pityocampa* Schiff.—Mediterranean.—M: Caldelas. July–August. Very common. Gerez. Very common, by day and at light. Vizela. June; August.—BB: S. Fiel. August.—E: Setúbal. August–September.—In S. Fiel larva in September–March. Foodplant: *Pinus maritima*. Attacks and destroys with preference the young trees.—In Setúbal the foodplants are: *Pinus pinea* L., *Pinus pinaster* Soland and *Pinus halepensis* Mill.

785. *Thaumetopœa herculeana* Rbr.—Iberian.—E: Setúbal. August.

LYMANTRIIDÆ

786. *Dasychira pudibunda* L.—Euro-Pacific.—M: Gerez. May. On sugar.

787. *Orgyia antiqua* L.—Holarctic.—M: Gerez.—Foodplant: *Rosa* sp.

788. *Arctornis l-nigrum* Müll.—Euro-Pacific.—M: Caldelas. September. Gerez. At light. Only one specimen from each of the above two localities.

789. *Lymantria dispar* L.—Holarctic.—M: Caldelas. Gerez. Guimarães. Vizela. July–August.—BB: S. Fiel. July–August.—E: Setúbal. July. Torres Vedras. July.—Foodplants: chestnut and *Quercus* sp.

790. *Lymantria monacha* L.—Euro-Pacific.—M: Gerez. Only one specimen.

791. *Lymantria atlantica* Rbr.—Western Mediterranean.—E: Setúbal. July–September.

792. *Ocneria rubea* F.—Mediterranean.—M: Gerez. Rare, at light.—E: Setúbal. August–September.

793. *Porthesia similis* Fuessly.—Euro-Pacific.—M: Gerez. Rare, at light. Guimarães. Vizela. May–June. August.—BL: Condeixa. August.

794. *Euproctis chrysoorrhæa* L.—Holarctic.—M: Gerez. Rare, at light.—BB: S. Fiel. June–July.

NOTODONTIDÆ

795. *Cerura verbasci* F.—Western Mediterranean.—BB: Ribeira da Ocreza and affluents. June; July.—According to Mendes there are two broods: the larva of the first brood is found in June and the imago emerges middle of July. The larva of the second brood is found in October–November and the imago emerges in June of the following year. Foodplants: *Salix aurita* L. and *Salix cinerea* L.

796. *Cerura furcula* Cl.—Euro-Pacific.—M: Gerez. May.—BB: S. Fiel. May.—Larva in October–November.

797. *Dicranura vinula* L.—Euro-Pacific.—M: Gerez. Common, at light. Vizela. May–June.—BB: S. Fiel. April.—Larva found in June.

798. *Stauropus fagi* L.—Euro-Pacific.—M: Gerez.

799. *Hoplitis milhauseri* F.—Euro-Pacific.—M: Caldelas. Rare. Vizela. May–June. Rare.—BB: Soalheira.—Larva in November.—Foodplant: *Quercus ilex* L.

800. *Drymonia querna* F.—Mediterranean.—M: Caldelas. August. Rare. Vizela. June. August.—BB: Ribeira da Ocreza. May. S. Fiel.—E: Torres Vedras. June. Inside of buildings.—Larva found in November.

801. *Drymonia chaoniä* Hbn.—Euro-Pacific.—M: Gerez. May. At light. Vizela. May.—f. *lunula* Grünberg.—M: Gerez. May.

802. *Notodonta ziczac* L.—Euro-Pacific.—M: Gerez.—BB: S. Fiel. September.—Larva in June. Foodplants: *Salix cinerea* L. and *Salix aurita* L.

803. *Notodonta anceps* Goeze.—Euro-Pacific.—M: Gerez. Vizela. May–June. Rare.

804. *Pterostoma palpina* L.—Euro-Pacific.—M: Caldelas. July. Rare. Gerez. At light. Vizela. June. Rare.—BB: S. Fiel. April–May; July.—E: Setúbal. May.

805. *Phalera bucephala* L.—Euro-Pacific.—M: Caldelas. July. Only two specimens. Gerez. At light, rare. Vizela. May–June.—BB: S. Fiel. July.—Larva in June–July. October–November. Foodplant: chestnut.

806. *Pigara pigra* Hufn.—Euro-Pacific.—M: Gerez. May.—BB: S. Fiel. March–April; June.

NOCTUIDÆ

807. *Diphthera alpium* Osbeck.—Euro-Pacific.—M: Caldelas. June. September. Gerez. Guimarães. Vizela. May–June. August. Common.

808. *Colocasia coryli* L.—Euro-oriental.—M: Caldelas. June–August. Gerez. May. Vizela. May–June.—BB: S. Fiel. May.

809. *Acronicta aceris* L.—Euro-oriental.—M: Caldelas. June–August. Common. Gerez. Rare. Vizela. May–June.—BB: S. Fiel. May.

810. *Acronicta leporina bradyporina* Tr.—Euro-Pacific.—M: Caldelas. Only one specimen. July.—BB: S. Fiel.

811. *Acronicta ligustri* F.—Euro-Pacific.—M: Caldelas. September.

812. *Acronicta megacephala* F.—Euro-oriental.—M: Guimarães.

813. *Acronicta pontica* Stgr.—Ponto-Mediterranean.—M: Caldelas. July. Rare.—E: Campolide.

814. *Acronicta psi* L.—Euro-Pacific.—M: Caldelas. July–August. Common. Vizela. May–June.—BB: S. Fiel. May.—E: Setúbal. May. Torres Vedras. May.—Larva in November.

815. *Chamæpora auricoma* F.—Euroriental.—BB: S. Fiel. May. Serra da Guardunha.—Larva in January, pupates in February. Foodplant: *Erica aragonensis*.

816. *Chamæpora euphorbiæ* F.—Euroriental.—M: Vizela. June.—BB: S. Fiel.

817. *Chamæpora rumicis* L.—Euro-Pacific.—M: Caldelas. July–August. Gerez. May. Guimarães. Vizela. May–June; October.—BB: S. Fiel. April. June; August.—E: Setúbal. July. Torres Vedras. March. June.—Larva in October. Foodplants: *Lonicera* sp., *Mentha* sp., and *Rubus* sp.

818. *Metachrostis raptacula* Hbn., f. *deceptricula* Hbn. and f. *oxybiensis* Mill.—Euroriental.—BB: S. Fiel. June; September.—f. *striata* Stgr.—BB: S. Fiel. End of July.

819. *Metachrostis ravula* Hbn.—Mediterranean.—F: Guimarães.—BB: S. Fiel. June; September.—E: Campolide.—f. *ereptricula* Tr.—M: Caldelas. July–August. Gerez. Vizela. May–June. August.—BB: S. Fiel. June; September.—f. *andalusia* Dup.—M: Caldelas. August. Rare.

820. *Metachrostis algæ* F.—European.—M: Caldelas. August. Vizela. June.—BB: Covilhã. July–August. S. Fiel.—E: Lisboa. August.—f. *lusitanica* Draudt.—The type locality of this form is Portugal, without more definite indication.

821. *Metachrostis muralis* Forst. (*glandifera* Hbn.).—European.—M: Caldelas. August. Guimarães. Vizela. May; August.—BL: Condeixa. August.—BB: Castelo Branco. July. S. Fiel. Serra da Estrêla. August. Serra da Guardunha.—E: Lisboa. September. Torres Vedras.—f. *par* Hbn.—E: Batalha. August.

822. *Metachrostis perla* F.—European.—M: Gerez. Rare.—BB: S. Fiel. September.

823. *Metachrostis perloides* Guen.—Iberian.—BB: S. Fiel. September.

824. *Euxoa obesa* Bsd.—Euroriental.—M: Gerez. On sugar. May.—E: Setúbal.

825. *Euxoa crassa* Hbn.—Euroriental.—M: Caldelas. September. Rare. Vizela. August. October.—BB: Covilhã. August. S. Fiel. September.—E: Setúbal. October–November.—f. *lata* Tr.—BB: S. Fiel.

826. *Euxoa chretieni* Dum.—Iberian.—M: Guimarães. April.

827. *Euxoa segetum* Schiff.—Euro-Pacific.—M: Caldelas. July–August. Gerez. On sugar. Guimarães. Vizela. July.—BB: S. Fiel. March–April.—E: Lisboa. August. Setúbal. September–October. Torres Vedras. March.

828. *Euxoa spinifera* Hbn.—Tropical.—E: Campolide. Santa Cruz. April. Setúbal. October.

829. *Euxoa obelisca* Schiff.—Euroriental.—BB: S. Fiel.

830. *Euxoa puta* Hbn.—Euroriental.—M: Caldelas. July.—BB: S. Fiel. March–April; September–October. Very common.—E: Setúbal. February–April; September–November. Sintra. April. Torres Vedras. April.—f. *lignosa* God.—BB: S. Fiel. March–April; September–October.—E: Torres Vedras. March–April.

831. *Euxoa trux* Hbn.—Ponto-Mediterranean.—M: Vizela. October.—BB: S. Fiel. September.

832. *Euxoa conspicua* Hbn.—Euroriental.—BB: S. Fiel. May.

833. *Euxoa tritici* L.—Euroriental.—M: Guimarães. August.—BB: S. Fiel. November–December.—f. *eruta* Hbn. and f. *seliginis* Dup.—BB: Serra da Estrêla. August.

834. *Euxoa exclamationis* L.—Euroriental.—M: Caldelas. July–August. Gerez. Guimarães. Vizela. May–June.—BB: Covilhã. May. August. S. Fiel.—E: Campolide. Setúbal. May.

835. *Rhyacia vestigialis* Rott.—Euroriental.—M: Caldelas. Common.

836. *Rhyacia ypsilon* Rott.—Holartic.—M: Caldelas. July–August. Guimarães. Vizela. June. August.—BB: Ribeira da Ocreza. August.

837. *Rhyacia faceta* Tr.—Western Mediterranean.—M: Gerez. March. Guimarães. January.—BB: February–March. December.—E: Setúbal. November–April. Sintra. April. Torres Vedras. January–April. Often found inside of houses.

838. *Rhyacia molothina* Esp.—European.—M: Caldelas. June.

839. *Rhyacia glareosa* Esp.—European.—M: Gerez.—BB: S. Fiel. October.—E: Torres Vedras. October.

840. *Rhyacia castanea* Esp.—European.—M: Gerez. March.—f. *neglecta* Hbn.—BB: S. Fiel.

841. *Rhyacia fidelis* Joan. (1903, Bull. Soc. Entom. France, p. 29–30).—Endemic.—BB: Quinta da Serra. May. S. Fiel. May.

842. *Rhyacia porphyrea* Schiff.—European.—M: Caldelas. July. Only one specimen.

843. *Rhyacia orbona* Hufn. (*comes* Hbn.).—Euroriental.—M: Caldelas. Rare. Gerez. On sugar. Guimarães. Vizela. June.—BB: Matta do Fundão, S. Fiel. June–August.—E: Setúbal. May–July. Torres Vedras. June–July. Often under fallen leaves.

844. *Rhyacia pronuba* L.—Euroriental.—M: Caldelas. July. Gerez. On sugar. Guimarães.—E: Lourical. May. Santa Cruz. April. Setúbal. May. Torres Vedras. May.

845. *Rhyacia c-nigrum* L.—Holarctic.—M: Caldelas. July. August. Common. Vizela. June.—BB: S. Fiel. May.—E: Setúbal. Torres Vedras. March; end of July. At light.

846. *Rhyacia flammatra* Schiff.—Euroriental.—BB: S. Fiel. May.

847. *Rhyacia plecta* L.—Holarctic.—M: Caldelas. Common.—f. *unimacula* Stgr.—M: Caldelas. June–August. Vizela. June; October.

848. *Rhyacia leucogaster* Frr.—Mediterranean.—M: Caldelas. June–August. Gerez. Guimarães. August.—BB: S. Fiel. May. August.—E: Setúbal. May–June. August.

849. *Rhyacia xanthographa* F.—Euroriental.—E: Setúbal. May. Torres Vedras. October.—f. *cohesa* H.S.—BB: S. Fiel.

850. *Rhyacia putris* L.—Euro-Pacific.—M: Caldelas. June–September. Very common. Vizela. May–June.

851. *Rhyacia saucia* Hbn.—Holarctic.—M: Caldelas. June–August. Very common. Gerez. August. On sugar. Guimarães. Vizela. June. August. October.—BB: S. Fiel. May; November.—E: Campolide. Lisboa. August. Setúbal. October–April. Very common. Torres Vedras. April.—Larva in October–November. Foodplant: *Sonchus oleraceus* L.

852. *Cerastis rubricosa* F.—Euroriental.—E: Torres Vedras. March.

853. *Triphaena fimbria* L.—Euroriental.—M: Caldelas. August. Only one specimen. Guimarães.
854. *Triphaena janthina* Esp.—Euroriental.—M: Gerez. On sugar. August. Guimarães.—BB: S. Fiel.—E: Setúbal. May–June. Torres Vedras. July.—f. *rufa* Tutt.—M: Gerez. On sugar. Vizela. August.
855. *Eureretagrotis agathina* Dup.—Atlantic.—BB: Serra da Estrêla. August.
856. *Actinotia hyperici* F.—Euroriental.—M: Caldelas. August. Only one specimen. Vizela. July.—BB: S. Fiel. March–April; June; August.
857. *Barathra brassicæ* L.—Euroriental.—M: Caldelas. June–September. Very common. Gerez. Guimarães. May. Vizela. June; August.—BB: S. Fiel. May; July. September.—E: Campolide. Estoril. March. Setúbal. April–May; September–October.—f. *albidilinea* Haw.—M: Caldelas. July.
858. *Scotogramma trifolii* Rott.—Holarctic.—M: Caldelas. September.—BB: S. Fiel. April. June; September–October.—E: Setúbal. August–September.
859. *Polia luteago argillacea* Hbn.—Euroriental.—BB: S. Fiel.
860. *Polia genistæ* Bkh.—Euroriental.—M: Caldelas. June–July. Gerez. September. Vizela. June. Very abundant.
861. *Polia persicariæ* L.—Euro-Pacific.—M: Vizela. June.
862. *Polia oleracæ* L.—Euroriental.—M: Caldelas. July–August. Common. Gerez. September. On sugar. Vizela. May–June. August.—BB: S. Fiel. May. September.—E: Setúbal. April.
863. *Polia nana* Hfngl.—Euroriental.—M: Vizela. June.
864. *Polia spinaciæ* View. (*chrysozona* Bkh.).—Euroriental.—M: Caldelas. July–August. Vizela. June.—BB: S. Fiel. April–May.—E: Campolide. Lisboa. August.—f. *caduca* H.S.—M: Caldelas. July. Rarer than the typical form.—E: Campolide.
865. *Harmodia rivularis* F.—Euro-Pacific.—M: Caldelas. July.
866. *Harmodia bicruris* Hfngl. (*capsincola* Esp.).—Euro-Pacific.—M: Caldelas. July.—BB: S. Fiel. April.—E: Setúbal. March–April.
867. *Harmodia lepida* Esp. (*carpophaga* Bkh.).—Eurorien-

tal.—M: Caldelas. July–August.—BB: S. Fiel.—E: Campolide. Setúbal. April–May.

868. *Harmodia magnolii* Bsd.—Ponto-Mediterranean.—M: Vizela. May–June. Frequent.—BB: S. Fiel. May.

869. *Harmodia xanthocyanea* Hbn.—Euroriental.—M: Vizela. May–June. Abundant.

870. *Harmodia albimacula* Bkh.—Euroriental.—M: Vizela. May. Rare.—BB: S. Fiel. June.—E: Setúbal. May. Torres Vedras. May.

871. *Harmodia nana* Rott. (nec Hfngl.).—Euroriental.—M: Gerez. May. On sugar and at light. Vizela. May–June.

872. *Tholera popularis* F.—Euroriental.—BB: Serra da Estrêla. August.

873. *Tholera cespitis* F.—Euroriental.—BB: S. Fiel. October.—E: Setúbal. October.

874. *Trichoclea albicolon* Sepp.—Euroriental.—M: Guimarães.—BB: S. Fiel. May.

875. *Monima stabilis* View.—Euroriental.—BB: S. Fiel. March.—Larva in April–May. Foodplant: *Quercus* sp.

876. *Monima pulverulenta* Esp.—Euroriental.—BB: S. Fiel. March.—Larva in May. Foodplant: *Quercus* sp.

877. *Monima incerta* Hfngl.—Euro-Pacific.—E: Setúbal. April.—f. *fuscatus* Haw.—M: Gerez. May.

878. *Monima gracilis* F.—Euro-Pacific.—BB: S. Fiel. April.—E: Setúbal. February–April.

879. *Hyphilare lithargyria grisea* Haw.—Euroriental.—M: Caldelas. August. Only one specimen.

880. *Hyphilare albipuncta* F.—Euroriental.—M: Caldelas. July–August. Vizela. June.—BB: S. Fiel. May–June. September.—E: Campolide. Setúbal. February–March. September–October. Very common. Torres Vedras. July. Frequent at light.

881. *Hyphilare argyritis* Rbr.—Western Mediterranean.—BB: Covilhã, S. Fiel. September.—E: Setúbal. September. Torres Vedras.

882. *Hyphilare loreyi* Dup.—Tropical.—M: Guimarães.—BB: S. Fiel. October.—E: Torres Vedras. July. October.

883. *Hyphilare L album* L.—Euroriental.—M: Caldelas.

July–August. Common. Guimarães. Vizela. May–June.—BB: S. Fiel. May–September.—E: Lisboa. August. Setúbal. February; November. Sintra. April.

884. *Sideridis vitellina* Hbn.—Euroriental.—M: Caldelas. June. Gerez. August. On sugar. Vizela. June. August.—BB: S. Fiel. April–June; September.—E: Lisboa. May. Setúbal. September. Torres Vedras. June.

885. *Sideridis sicula* Tr.—Western Mediterranean.—M: Caldelas. July.

886. *Sideridis putrescens* Hbn.-G.—Euroriental.—BB: S. Fiel. September.—E: Setúbal. April. September.

887. *Sideridis scirpi* Dup.—Euroriental.—M: Caldelas. July–August. Vizela. June.—BB: Covilhã, S. Fiel. April–May; September.—E: Setúbal. September.—f. *dactylidis* Bsd.—E: Torres Vedras. May.—f. *montium* Bsd.—E: Torres Vedras. April.

888. *Sideridis unipuncta* Haw.—Tropico-Holarctic.—M: Caldelas. August–September. Gerez. August. On sugar. Guimarães. May. Vizela. June. August.—E: Batalha. August. Campolide. Lisboa. June. August. Setúbal. February. April. Torres Vedras. February.

889. *Cucullia chamomilla* Schiff.—Euroriental.—BB: S. Fiel. April.—E: Torres Vedras. March.

890. *Cucullia tanacetii* Schiff.—Euroriental.—BB: S. Fiel.—E: Setúbal. End of August.—Foodplant: *Achillea ageratum* L.

891. *Cucullia santolinæ* Rbr.—Western Mediterranean.—BB: S. Fiel. November.

892. *Cucullia blattaria* Esp.—Euroriental.—M: Gerez. May. Vizela. June. Rare.

893. *Cucullia verbasci* L.—Euroriental.—M: Gerez. May.—BB: S. Fiel. April–May.—E: Setúbal. April–May.—Larva in May–June. Foodplant: *Verbascum thapsus*.

894. *Lophoterges millieri* Stgr.—Iberian.—BB: S. Fiel. May.

895. *Metopoceras felicina* Donz.—Western Mediterranean.—BB: S. Fiel. April–June.—E: Setúbal. March; July. Torres Vedras. May.

896. *Cleophana batika* Rbr.—Mediterranean.—BL: Lousã.—BB: S. Fiel. April–May.—E: Setúbal. May.

897. *Cleophana diffluens* Stgr.—Iberian.—M: Caldelas. July–August. Gerez. May. Vizela. May–June. Very common.—E: Sintra. April. At light.—f. *lusitanica* Culot.—Alg: Caldas de Monchique (type locality).

898. *Cleophana yvanii* Dup.—Western Mediterranean.—M: Gerez. At light, abundant.—BB: S. Fiel. April–June.—f. *korbi* Stgr.—BB: S. Fiel. Common.

899. *Amephana aurita* F. (*dejeanii* Dup.).—Mediterranean.—E: Setúbal. April–May.

900. *Omphalophana serrata* Tr.—Western Mediterranean.—E: Setúbal. April.

901. *Calophasia lunula* Hfngl.—Euro-Pacific.—M: Vizela. June.

902. *Calophasia almoravida* Grasl.—Iberian.—BB: S. Fiel. April–May.—Larva in May–June. Foodplant: *Linaria spartea*.

903. *Calophasia hamifera* Stgr.—Iberian.—BB: S. Fiel. April–May; July.—Foodplant: *Linaria spartea*.

904. *Calophasia platyptera* Esp.—Euroriental.—M: Gerez. July. At light.—BL: Condeixa. July–August.—BB: S. Fiel. May. Serra da Estrêla. August.

905. *Leucochlæna oditis* Hbn. (*hispidæ* Hbn.G.).—Mediterranean.—BB: S. Fiel. September–October.—f. *hispanica* Warren.—M: Vizela. October.

906. *Derthisa trimacula hispana* Bsd.—Mediterranean.—E: Setúbal. October.

907. *Dasypolia templi* Thnbg.—Euroriental.—M: Guimarães. February.

908. *Aporophila lutulenta* Bkh.—European.—BB: S. Fiel. October.

909. *Aporophila nigra* Haw.—Euroriental.—M: Gerez. Rare. On Sugar. Vizela. June.—BB: S. Fiel. October–November.—E: Setúbal. October–November. Torres Vedras. December.—Larva in March–April. Foodplant: *Cytisus albus* Lk.

910. *Lithophane semibrunnea* Haw.—European.—BB: S. Fiel. December.—E: Setúbal. February–March.

911. *Xylina vetusta* Hbn.—Euroriental.—BB: S. Fiel. October.

912. *Xylina exoletæ* L.—Euroriental.—BB: S. Fiel.—Larva in May. Foodplant: *Cytisus albus* Lk. Pupates in June.

913. *Dichonia areola* Esp.—Euroriental.—M: Gerez. May.—BB: S. Fiel. February. April. November.—E: Setúbal. February. November–December.

914. *Dryobota furva* Esp.—Euroriental.—BL: Lousã. November.—BB: Soalheira.—Larva in May. Foodplant: *Quercus ilex* L.

915. *Meganephria oxyacanthæ* L.—Euroriental.—BB: S. Fiel. November.—E: Setúbal. October–November.

916. *Eumichtis lichenea* Hbn.—Western Mediterranean.—BB: S. Fiel. October.

917. *Crino solieri* Bsd.—Ponto-Mediterranean.—E: Campolide. Setúbal. October–November. Torres Vedras. Frequent.

918. *Dryobotodes monochroma* Esp.—European.—BB: S. Fiel. May.

919. *Dryobotodes roboris* Hbn.G.—Euroriental.—BL: Lousã. November.—BB: Soalheira. November.—Larva in April–May. Foodplant: *Quercus ilex* L.

920. *Dryobotodes protea* Esp.—Euroriental.—BL: Lousã. November.—BB: Soalheira.—Larva in May. Foodplant: *Quercus ilex* L.

921. *Valeria jaspidea* Vill.—European.—BB: S. Fiel. March–April.—E: Torres Vedras. March.

922. *Antitype flavicincta* F.—Euroriental.—BB: S. Fiel.—E: Setúbal. October. December. Torres Vedras.—Larva in April. Foodplant: *Cytisus albus* Lk.—f. *meridionalis* Bsd.—BB: S. Fiel. October–November.

923. *Antitype rufocincta* Hbn.—Mediterranean.—M: Gerez. September.

924. *Antitype argillaceago* Hbn.—Ponto-Mediterranean.—M: Vizela. May. Only one specimen.

925. *Antitype canescens* Dup.—Mediterranean.—BB: S. Fiel. October.

926. *Antitype xanthomista* Hbn.—European.—BB: S. Fiel. July. September.—E: Setúbal. January. May. October. December.—f. *nigrocincta* Tr.—BB: S. Fiel. July. September.

927. *Rhizotype flammea* Esp.—European.—M: Gerez. Rare.—BB: S. Fiel. October.—E: Campolide. Setúbal. October–November. Common. Torres Vedras. October.

928. *Rhizotype iodea* Guen.—Western Mediterranean.—BB: S. Fiel. October.

929. *Xantholeuca croceago corsica* Mab.—Euroriental.—BB: S. Fiel. October.—Larva in May. Foodplant: *Quercus toza* Bosc.

930. *Conista rubiginea* F.—Euroriental.—M: Gerez. March.—BB: S. Fiel. December.

931. *Conistra staudingeri* Grasl.—Western Mediterranean.—BB: S. Fiel. December–March.—f. *uniformis* Stgr.—BB: S. Fiel. March.—f. *scortina* Stgr.—E: Sintra. April. At light, only one specimen.—f. *lusitanica* Spul.—Described from Portugal without more definite locality.

932. *Omphaloscelis lunosa* Haw.—Atlantic.—M: Gerez. October. Guimarães.—BB: S. Fiel. October.—f. *olivacea* Vázquez.—BB: S. Fiel. October.—f. *rubra* Vázquez.—S. Fiel. October.

933. *Spudea rutilicella* Esp.—Euroriental.—BB: S. Fiel. March.—E: Setúbal. February–March. Torres Vedras. End of February–March.

934. *Spudea witzemanni* Stndfs.—Western Mediterranean.—E: Torres Vedras.

935. *Amathes lychnidis pistacina* F.—Euroriental.—BB: S. Fiel. October–November.—E: Setúbal. October–November. Torres Vedras. January.—f. *canaria* Esp.—BB: S. Fiel. October–November.—f. *rubetra* Esp.—BB: S. Fiel. October–November.—E: Setúbal. October–November. Torres Vedras.

936. *Amathes circellaris* Hfngl.—Euroriental.—M: Vizela. May–June. August.

937. *Amathes helvola* L.—Euroriental.—BB: S. Fiel. November.—E: Torres Vedras. November.

938. *Amathes litura* L.—Euroriental.—BB: S. Fiel. October.—f. *meridionalis* Stgr.—BB: S. Fiel. November.

939. *Athetmia xerampelina unicolor* Stgr.—Euroriental.—BB: S. Fiel.—E: Campolide, Torres Vedras.

940. *Cosmia gilvago* Esp.—Euroriental.—E: Campolide.

941. *Amphipyra pyramidea* L.—Euro-Pacific.—M: Gerez. August. On sugar.

942. *Stygiostola umbratica ferruginea* Steph.—Euroriental.—M: Gerez. Rare.

943. *Mania maura* L.—Euroriental.—M: Gerez.—BB: S. Fiel. August.—f. *striata* Tutt.—M: Gerez. At light.
944. *Dipterygia scabriuscula* L.—Holarctic.—M: Gerez. May. At light. Guimarães.
945. *Oligia strigilis* Cl.—Euroriental.—M: Guimarães. May. Vizela. May–June.—BB: S. Fiel. June.—E: Setúbal. April. Torres Vedras. October.
946. *Eremobia ochroleuca* Esp.—Euroriental.—BB: S. Fiel. June.
947. *Pseudohadena halimi* Mill.—Western Mediterranean.—BB: S. Fiel.
948. *Luperina testacea* Hbn.—Euroriental.—BB: S. Fiel. September.
949. *Luperina nickertii* Frr.—European.—BB: S. Fiel.
950. *Trachea atriplicis* L.—Euro-Pacific.—M: Caldelas. August. Common. Gerez. Rare. At light.—BB: Covilhã. August.
951. *Euplexia lucipara* L.—Euro-Pacific.—M: Caldelas. July–August. Gerez. Rare. Vizela. May–June. Rare.
952. *Trigonophora meticulosa* L.—Euroriental.—M: Caldelas. August–September. Vizela. May.—BB: S. Fiel. April; September–October.—E: Campolide. Setúbal. April–May; October–November. Torres Vedras.—Larva in January. Foodplant: *Umbilicus pendulinus* D.C.
953. *Eriopus juventina* Cram. (*purpureofasciata* Piller).—Euro-Pacific.—M: Caldelas. June–September. Very abundant. Gerez. September. At light. Vizela. May–June. August.—BL: Lousã.—BB: Castelo Novo, S. Fiel. June–July. September.
954. *Eriopus latreillei* Dup.—Euroriental.—BB: S. Fiel. February; May; August.
955. *Polyphænis sericata* Esp.—Euroriental.—M: Gerez. August.—E: Setúbal. July–August. Torres Vedras. October.
956. *Thalpophila vitalba* Frr.—Western Mediterranean.—BB: S. Fiel.—E: Torres Vedras.—f. *amathusia* Ramb.—M: Vizela. August.
957. *Stilbia anomala* Haw.—Euroriental.—M: Vizela. October.—BB: Serra da Guardunha. September.
958. *Laphygma exigua* Hbn.—Tropico-Holarctic.—M: Caldelas. July. Seixas.—BB: S. Fiel. June–September.—E: Cam-

polide, Lisboa. June–September. Frequent at light. Setúbal. July. September–October.—Alg: observed by Tavares without definite locality.—Larva in July—first half of August. Hibernates as pupa. Foodplant: *Zea mais* L. Causes extensive damages according to Tavares (1928, Brotéria, Série zoológica, 25, p. 153–158).

959. *Athetis ambigua* Schiff.—Euroriental.—M: Caldelas. July–August. Guimarães. Vizela. June.—BB: S. Fiel. May.—E: Campolide. Santa Cruz. April. Setúbal. September. Torres Vedras. May–June.

960. *Athetis superstes* Tr.—Euroriental.—M: Caldelas. July–August. Vizela. June.

961. *Athetis respersa* Schiff.—Euroriental.—BB: Matta do Fundão. End of June.

962. *Athetis selini* Bsd.—Euroriental.—BB: S. Fiel. October.—f. *noctivaga* Bell. (*infusca* Const.).—BB: S. Fiel. May.—E: Setúbal.

963. *Athetis clavipalpis* Scop. (*quadripunctata* F.).—Euroriental.—BL: Condeixa. August.—BB: S. Fiel. March. May. August.—E: Campolide. Setúbal. September–October.

— *Athetis grisea* Ev. (*cinerascens* Tgstr.).—European.—BB: S. Fiel. Recorded by Mendes. This species occurring only in Scandinavia, Finland and the Ural Mountains, its capture in Portugal certainly is doubtful.

964. *Athetis terrea* Frr.—Euro-Pacific.—M: Gerez.

965. *Athetis proxima* Rmb.—Euro-Pacific.—BB: S. Fiel. June.—*proxima* Rmb. is a valid species, distinct from *A. kadeni* Frr. and from *fuscicornis* Rmb. according to Boursin (1936).

966. *Athetis germainii* Dup.—Western Mediterranean.—BB: S. Fiel.—E: Setúbal. September.

967. *Petilampa palustris* Hbn.—Euro-Pacific.—BB: Ribeira da Ocreza. August. October. S. Fiel. June.

968. *Calymnia affinis* L.—Euro-Pacific.—E: Lisboa. End of June.

969. *Calymnia pyralina* View.—Euro-Pacific.—M: Vizela. June. Only one specimen.

970. *Dicycla oo* L. and f. *renago* Haw.—Euroriental.—BB: S. Fiel. June.

971. *Enargia ulicis* Sgtr.—Iberian.—E: Torres Vedras. November.

972. *Enargia regina* Stgr.—Ponto-Mediterranean.—M: Vizela. October.

973. *Arenostola pygmina fulva* Hbn.—Euroriental.—BB: S. Fiel. September–October.

974. *Cænobia rufa* Haw.—European.—BB: S. Fiel. October.

975. *Oria musculosa* Hbn.—Euroriental.—E: Campolide. Setúbal. August–September. Torres Vedras. July.

976. *Orio myodea* Rmb.—Iberian.—BB: S. Fiel. October.

977. *Semasia vuteria* Stoll. (*nonagrioides* Lef.).—Mediterranean.—M: Caldelas. July–September.—BB: S. Fiel. May–July; September–October.—E: Setúbal. September–October. Torres Vedras. May; July.—Larva in May–June. Foodplant: *Zea mais* L. This species never occurs in such great number as to cause extensive damage according to Tavares (1928, *Broteria, Série zoológica*, 25, p. 160).

978. *Calamia virens* L.—European.—BB: Serra da Estrêla. End of August.

979. *Synthymia fixa* F. (*monogramma* Hbn.).—Mediterranean.—E: Setúbal. April–May.

980. *Ægle vespertalis* Hbn.—Ponto-Mediterranean.—BB: S. Fiel. June.—E: Setúbal. July.

981. *Chloridea dipsacea* L.—Euro-Pacific.—BB: S. Vicente da Beira. May.—E: Setúbal. May.

982. *Chloridea peltigera* Schiff. (*armigera* Hbn.).—Euroriental.—M: Caldelas. July. Vizela. June.—BB: Covilhã. August. S. Fiel. June; September. Serra da Estrêla. August. Serra da Guardunha. September.—E: Campolide. Lisboa. August. Setúbal. March; August–November. Torres Vedras. June.

983. *Rhodocleptria incarnata* Frr.—Ponto-Mediterranean.—BB: Serra da Guardunha. May.—E: Santa Cruz. April. Setúbal. April; June.

984. *Cladocera optabilis* Bsd.—Western Mediterranean.—BB: S. Fiel. October.

985. *Anarta myrtilli* L.—European.—M: Vizela. June. August. Rare.—E. Sintra. April. Common.—f. *peralbata* Warren.—M: Gerez. By day.—f. *citrina* Warren.—E: Sintra (type locality).

986. *Leptosia dardouini* Bsd.—Mediterranean.—BB: S. Fiel. June; September.
987. *Eublemma arcuinna* Hbn.—Euro-Pacific.—BB: S. Fiel.—f. *blandula* Rbr.—BB: Serra da Guardunha. September.
988. *Eublemma suava* Hbn.—Mediterranean.—BB: S. Fiel. September. Serra da Guardunha.
989. *Eublemma jucunda* Hbn.—Western Mediterranean.—E: Oeiras. June. Setúbal. July. Torres Vedras. June–July.
990. *Coccidiphaga scitula* Rbr.—Mediterranean.—BB: S. Fiel. June.—E: Setúbal. August.
991. *Porphyrinia ostrina* Hbn.—Euroriental.—M: Caldelas. July. Vizela. June.—BB: S. Fiel. June.—E: Batalha. August. Setúbal. August. November. Torres Vedras. March.—f. *carthami* H.S.—BB: Serra da Estrêla. August. Serra da Guardunha. August.—E: Torres Vedras. July.—f. *astivalis* Guen.—E: Torres Vedras. June.
992. *Porphyrinia parva* Hbn.—Ponto-Mediterranean.—M: Caldelas. July. Rare.—BB: Quinta dos Carvalhos. September. S. Fiel. July.—E: Estoril. September. Very small specimen. Wingspread 12 mm. Setúbal. July–September. Torres Vedras. End of June–July.
993. *Porphyrinia candidana* F.—Mediterranean.—BB: S. Fiel. May. Soalheira.—E: Setúbal. May–June.
994. *Porphyrinia respersa* Hbn.—Mediterranean.—M: Vizela. June.
995. *Porphyrinia purpurina* Schiff.—Ponto-Mediterranean.—BB: Serra da Guardunha. June. Only one specimen, bred from larva.
996. *Porphyrinia polygramma* Dup.—Mediterranean.—M: Vizela. June.—E: Setúbal. June–July.—f. *putorina* Stgr.—BB: Serra da Guardunha. June.—E: Setúbal. July.
997. *Porphyrinia pura* Hbn.—Western Mediterranean.—E: Oeiras. August. Torres Vedras. End of March.
998. *Lithacodia fasciana* L.—Euro-Pacific.—M: Caldelas. July–August. Gerez. May. Vizela. June; August.
999. *Tarache lucida* Hufn.—Euroriental.—BB: S. Fiel. April; June; September.—E: Setúbal. June–September.—f. *albicollis* F.—E: Oeiras. June. Setúbal. September.

1000. *Tarache luctuosa* Esp.—Euroriental.—BL: Lousã. May.—BB: Covilhã. September. S. Fiel. June; September.—E: Campolide. Very abundant. Oeiras. June. Setúbal. May–September. Torres Vedras. June–July.

1001. *Eutelia adulatrix* Hbn.—Ponto-Mediterranean.—BB: S. Fiel.—E: Setúbal. July–August.

1002. *Sarrothripus revayana* Scop. (*undulana* Hbn.) and f. *dilutana* Hbn., f. *degenerana* Hbn.—Holaretic.—M: Vizela. August.—BB: S. Fiel. June–July; October.—f. *glauca* Lampa.—M: Vizela. June.—f. *ilicana* F.—M: Caldelas. July.—BB: S. Fiel. June–July; October.

1003. *Earias vernana* Hbn.—European.—M: Caldelas. July–August. Rare.—BB: S. Fiel. End of May.

1004. *Hylophila prasinana* L.—Euro-Pacific.—M: Caldelas. July–September. Very common. Gerez. May. Guimarães. Vizela. May–August; October. Rare.—BB: S. Fiel. June–July.

1005. *Hylophilina bicolorana* Fuessl.—Euroriental.—M: Gerez.—BB: Monte de S. José. S. Fiel. May–August.—Larva in May. Foodplant: *Quercus toza* Bosc.

1006. *Mormonia dilecta dayremi* Oberth.—Euroriental.—M: Gerez. On sugar.

1007. *Mormonia spona* L.—Euroriental.—BB: Casal da Serra, Covilhã. July–September. On the trunks of chestnut trees.—E: Louriçal. Setúbal. July–August.

1008. *Catocala nupta* L.—Euro-Pacific.—M: Gerez. On sugar.—E: Louriçal. July–August.

1009. *Catocala elocata* Esp.—Euroriental.—M: Caldelas. August. Common on old walls. Gerez. On sugar. Guimarães. November. Vizela. August. October.—BL: Condeixa. August.—BB: Quinta dos Carvalhos. August. Quinta dos Fornos. July. Serra da Estrêla. On WSW slopes. August.—E: Setúbal. July–September.

1010. *Catocala promissa* Esp.—Euroriental.—M: Gerez. On sugar.—BB: Quinta dos Fornos. July.

1011. *Catocala conjuncta* Esp.—Mediterranean.—BB: Quinta dos Fornos. July.

1012. *Catocala optata* God.—Western Mediterranean.—M: Caldelas. July–August. Rare. Gerez. On sugar.—BB: S. Fiel. September. Serra da Estrêla. WSW slopes. August.

1013. *Catocala nymphagoga* Esp.—Mediterranean.—BL: Lousã. June.—BB: Castelo Novo. Monte de S. José. June. On trunk of oak trees.—E: Setúbal. May.

1014. *Catocala conversa* Esp.—Mediterranean.—BB: Quinta dos Fornos, S. Fiel. June–August.—E: Setúbal. June. Torres Vedras. July.

1015. *Ephesia nymphæa* Esp.—Mediterranean.—M: Gerez. August. By daylight.—BB: S. Fiel. July.

1016. *Minucia lunaris* Schiff.—Mediterranean.—E: Setúbal. Sintra. April. Torres Vedras. May.—f. *olivescens* Warren.—E: Sintra (type locality).

1017. *Anua tirhaca* Cram. (*thirraea* Auct.).—Euroriental.—E: Serra da Arrabida. February. Setúbal. May.

1018. *Ophiusa algira* L.—Euro-Pacific.—M: Caldelas. July–August. Common. Gerez. By daylight. Guimarães. Vizela. May–June. October.—BL: Condeixa. August.—BB: Covilhã, S. Fiel. June–September.—E: Setúbal. June. September–October. Torres Vedras.

1019. *Grammodes stolidia* F.—Mediterranean.—E: Setúbal. September.

1020. *Cerocala scapulosa* Hbn.—Western Mediterranean.—E: Santa Cruz. End of April. Setúbal. April–May.

1021. *Gonospileia mi* Cl.—Euro-Pacific.—M: Gerez. By daylight.—f. *aurantiaca* Warren.—Described from Portugal, without more definite locality.

1022. *Gonospileia glyphica* L.—Euro-Pacific.—M: Gerez. May.—BB: Monte de S. José. May. Sabugueiro. Early June.—E: Setúbal.

1023. *Phytometra festuæ* L.—Euro-Pacific.—M: Caldelas. July. Rare. Vizela. May. Only one specimen.—E: Campolide.

1024. *Phytometra chrysitis* L.—Euro-Pacific.—M: Caldelas. July–August. Rare.—f. *aurea* Huene.—BB: Matta do Fundão. June.

1025. *Phytometra orichalcea* F. (*aurifera* Hbn.).—Tropical.—M: Vizela. October.—BL: Condeixa. August.—BB: Quinta do Ribeiro Negro. September.—E: Setúbal. July–August; December.

1026. *Phytometra chalcytes* Esp.—Mediterranean.—M: Cal-

delas. August–September.—BL: Condeixa. July–August.—BB: S. Fiel. August.—E: Setúbal. September–March. Torres Vedras. October.—Larva in October–November. Foodplants: *Coleus* sp. and *Solanum nigrum* L.

1027. *Phytometra deaurata* Esp.—Euro-oriental.—BB: S. Fiel.

1028. *Phytometra gamma* L.—Euro-oriental.—M: Caldelas. June; August. Very common. Guimarães. June. August. October. Very common.—BL: Condeixa. July–September. Very common.—BB: S. Fiel. April. June. August. October.—E: Campolide. Oeiras. May–June. Setúbal. From February on. Sintra. April. Torres Vedras. January. April.—Foodplants: *Verbascum* sp. and *Solanum nigrum* L.

1029. *Phytometra accentifera* Lef.—Mediterranean.—M: Caldelas. July. Rare.—BL: Condeixa. August.—BB: S. Fiel. September.—E: Setúbal. August–September.

1030. *Phytometra confusa* Stph. (*gutta* Guen.).—Euro-Pacific.—M: Caldelas. July–August. Guimarães. Vizela. May–June. October.—BL: Condeixa. August. Rare.—BB: S. Fiel. June. August. October.—E: Setúbal. June–August.

1031. *Phytometra ni* Hbn.—Euro-Pacific.—BB: S. Fiel. July–August.—E: Lisboa. August. Setúbal. August. Torres Vedras. End of July.

1032. *Abrostola triplasia* L.—Euro-Pacific.—M: Caldelas. July. Rare. Vizela. October.—E: Setúbal. June–July.

1033. *Abrostola ascelepiadis* Schiff.—Euro-Pacific.—BB: S. Fiel. April.—E: Setúbal. April–May. Torres Vedras. March.

1034. *Scoliopteryx libatrix* L.—Holarctic.—M: Vizela. June. Rare.

1035. *Apopestes spectrum* Esp.—Euro-Pacific.—BB: S. Fiel. February–March; September. Inside of houses, at dark and moist places.—E: Setúbal. August.

1036. *Autophila dilucida* Hbn.—European.—BB: S. Fiel.—E: Setúbal. March–April.

1037. *Autophila cataphanes* Hbn.—Euro-oriental.—M: Vizela. May. Only one specimen.—BB: S. Fiel. March; June–September. Inside of houses.

1038. *Toxocampa pastinum* Tr.—Euro-Pacific.—BB: S. Fiel. June.

1039. *Catephia alchymista* Schiff.—Euroriental.—M: Caldelas. August. Only one specimen. Vizela. June. Rare.
1040. *Aleucanitis cailinio* Lef.—Ponto-Mediterranean.—BB: S. Fiel, S. Vicente da Beira. April–May.—E: Setúbal. May.
1041. *Prothymnia viridaria* Cl.—Euroriental.—M: Caldelas. July. Rare. Gerez.—E: Setúbal. June–July. Sintra. April.—f. *fusca* Tutt.—M: Caldelas. August. Rare.
1042. *Prothymnia sanctiflorentis* Bsd.—Iberian.—E: Val de Rosal. April.
1043. *Rivula sericealis* Scop.—Euro-Pacific.—M: Caldelas. August. Rare. Vizela. May–June. October.
1044. *Zanclognatha nemoralis* F.—European.—M: Caldelas. June–July. Rare.
1045. *Herminia crinalis* Tr.—Euroriental.—BB: S. Fiel. June. Serra da Estrêla. August.—E: Setúbal. May. Torres Vedras. June.
1046. *Hypena proboscidalis* L.—Euro-Pacific.—M: Vizela. May.—BB: Matta do Fundão. End of May.
1047. *Hypena rostralis* L.—Euro-Pacific.—M: Guimarães. August.—BB: S. Fiel. April; October. Common inside of houses.—E: Campolide. Setúbal. February. May–June. Torres Vedras.
1048. *Hypena obsitalis* Hbn.—Mediterranean.—M: Caldelas. July. Rare.—BB: S. Fiel. May; December.—E: Lisboa. November–December. Frequent inside of houses. Setúbal. September–October.
1049. *Hypena lividalis* Hbn.—Ponto-Mediterranean.—M: Guimarães.—BB: Covilhã. September. S. Fiel. September. Serra da Estrêla. August.—E: Lisbôa. November. Common by daylight. Setúbal. August. September.
1050. *Hypenodes costæstrigalis* Stph.—Euroriental.—M: Caldelas. July. Rare.

ARCTIIDÆ

1051. *Mitochondria miniata* Forst.—Euro-Pacific.—M: Caldelas. One specimen only. Gerez. Frequent at light.
1052. *Apaidia mesogona* God.—Western Mediterranean.—E: Setúbal. April–May. Torres Vedras. End of June.
1053. *Paidia murina* Hbn.—Euroriental.—M: Caldelas. July–August. Common. Gerez. Common by day and at light. Gui-

marães. Vizela. June. At light.—BB: S. Fiel. July–August.—E: Campolide. Setúbal. July. Torres Vedras. June–July. Frequent at light.

1054. *Lithosia griseola* Hbn.—Euroriental.—E: Setúbal. June–July.

1055. *Lithosia lurideola* Zinck.—Euroriental.—M: Gerez. Common at light.—E: Setúbal. September–October.

1056. *Lithosia complana* L.—Euroriental.—M: Caldelas. July. September. Gerez. Common at light. Vizela. June–July. October. At light.

1057. *Lithosia caniola* Hbn.—European.—BB: S. Fiel. October.—E: Setúbal. April. August.

1058. *Lithosia lutarella* L.—Euro-Pacific.—E: Setúbal. April–May.

1059. *Lithosia pallifrons marcida* Mann.—Mediterranean.—E: Torres Vedras. Middle of July.

1060. *Lithosia sororecula* Hufn.—Euroriental.—M: Vizela. May–June. Rare. At light.

1061. *Coscinia striata* L.—Euro-Pacific.—M: Gerez. Common by day.—BB: Serra da Estrêla, 1600 m. July.—f. *pallida* Butl.—M: Gerez.

1062. *Coscinia cribaria* L. (*cribum* L.).—Mediterranean.—M: Gerez. Common by day.—f. *candida* Cyr.—BB: Serra da Estrêla, Serra da Guardunha. August–September.—f. *punctigera* Frr.—M: Caldelas. July.—f. *chrysocephala* Hbn.—BB: Serra da Estrêla, WSW slopes.—E: Campolide. In two broods. Lisboa. First brood: wingspread 42 mm., second brood: wingspread 30 mm. Torres Vedras. June; October. No typical *cribaria* L. have been found in Extremadura; all specimens are of f. *chrysocephala* Hbn.

1063. *Utetheisa pulchella* L.—Tropical.—BB: Portas do Rodam. April. S. Fiel. End of May.—E: Setúbal. Torres Vedras. May.

1064. *Ocnogyna latreillei* God.—Iberian.—M: Gerez.—BB: Monte de S. José. S. Fiel.—E: Sintra. April. Only one specimen.—Larva in May, pupates in June and hibernates as pupa.—Foodplant: *Cytisus albus* Lk.

1065. *Phragmatobia fuliginosa* L.—Euroriental.—M: Caldelas.

July–September. Common. Gerez. Common. Guimarães. Vizela. May–June; October. Very abundant.—BB: S. Fiel. April; July.—E: Setúbal. February.

1066. *Euprepia pudica* Esp.—Mediterranean.—M: Caldelas. September. Gerez. Rare. Vizela. August; October.—BB: S. Fiel. September.—E: Torres Vedras.—Mendes has observed the larva feeding in March. It goes under earth early in April, without pupating and stays there without feeding until August. Pupates end of August and the imago emerges end of September. Foodplant: Graminaceæ.

1067. *Spilarctia lubricipeda* L.—Euro-Pacific.—M: Caldelas. June–August. Gerez. Common. Vizela. May–June.

1068. *Spilosoma menthastri* Esp.—Euro-Pacific.—M: Caldelas. July–August. Common. Gerez. Very common. Guimarães. Vizela. May–June; August. Common.—BB: Quinta do Ribeiro Negro, S. Fiel. May; July–August.—E: Setúbal. May.

1069. *Diaphora mendica* Cl.—Euroriental.—M: Gerez. Frequent.—BB: Matta do Fundão. Late April. Only one specimen.—E: Setúbal. February–March.

1070. *Rhyparia purpurata* L.—Euro-Pacific.—M: Gerez. Bred from larva.

1071. *Diacrisia sannio* L.—Euro-Pacific.—M: Gerez. Frequent by day.

1072. *Arctia fasciata* Esp.—Western Mediterranean.—M: Gerez. At light. Guimarães.—BB: Serra da Guardunha. May.—Larva in March–April. Foodplants: Graminaceæ.—f. *gratiosa* Hbn.—M: Gerez. Only one specimen. At light.—f. *esperii* Stgr.—M: Gerez. Frequent at light.

1073. *Arctia caja lusitanica* Spul.—Holartic.—This form has been described from Portugal, without more definite locality. End of June–August. There is no record of the occurrence of typical *caja* L. from Portugal.

1074. *Arctia villica* L.—Euroriental.—M: Gerez. Very common at light.—E: Setúbal. February–April. Torres Vedras. May.—f. *angelica* Bsd.—BB: S. Fiel. May. Only one specimen observed.

1075. *Callimorpha dominula* L.—European.—M: Gerez. One specimen only.—f. *bieli* Stgr. (1894, *Iris*, 7, p. 255).—M: Gerez

(type locality).—*f. lusitanica* Stgr. (1894, *Iris*, 7, p. 255).—M: Gerez (type locality).

1076. *Callimorpha quadripunctaria* Poda.—Euroriental.—M: Caldelas. July–August. Common. Gerez. Very common by day. Guimarães. Vizela. August–September.—BB: Castelo Novo. August. Matta do Fundão, Quinta do Ribeiro Negro. August. On the trunk of chestnut trees. Serra da Estrêla. August.—E: Setúbal. October.

1077. *Hipocrita jacobae* L.—Euroriental.—Alg: São Marcos da Serra. May.

1078. *Nola cucullatella* L.—European.—BB: S. Fiel. May; July; September.—E: Setúbal. June–July.

1079. *Ræselia togatutalis* Hbn.—Euroriental.—E: Setúbal. Torres Vedras. June–July.

1080. *Celama confusalis* H.S.—Euro-Pacific.—M: Caldelas. July. Only one specimen.—BB: S. Fiel. September. Only one specimen. Very dark.

1081. *Celama cristatula subchlamydula* Stgr.—Mediterranean.—BB: S. Fiel. April; June.—E: Setúbal. July. Torres Vedras. March.

1082. *Celama chlamitutalis* Hbn.—Mediterranean.—E: Setúbal. June.

SYNTOMIDÆ

1083. *Dysauxes punctata* F. and *f. servula* Berce.—Euroriental.—BB: Monte de S. José. May.

SATURNIIDÆ

1084. *Saturnia pyri* Schiff.—Euroriental.—M: Gerez. Frequent at light. Vizela. May. Only one specimen.—BB: S. Fiel. April.—E: Setúbal. April.—Alg: Serra de Monchique.—Larva in June–July. Foodplants: fruit trees and *Ulmus campestris* L.

1085. *Eudia pavonia* L.—Euro-Pacific.—M: Gerez. Vizela. May. Only one specimen. At light.—E: Sintra. April. Common.

SPHINGIDÆ

1086. *Acherontia atropos* L.—Tropical.—M: Vizela. May. At light. Rare.—BB: S. Fiel. May; August–September.—E: Setúbal. October.—Larva in May–June; October–November.—Foodplants *Solanum tuberosum* and *Olea europæa*.

1087. *Herse convolvuli* L.—Tropical.—M: Caldelas. August–September.—BL: Condeixa. August. Common.—BB: S. Fiel.—E: Lisboa. Setúbal. September.—Larva in October. Foodplant: *Convolvulus arvensis* L.

1088. *Sphinx ligustri* L.—Euroriental.—BB: S. Fiel.—Larva in October.

1089. *Marumba quercus* Schiff.—Mediterranean.—M: Gerez. Vizela. June. Only one specimen. At light.—BB: S. Fiel. Late June. Only one specimen.—Foodplant: *Quercus* sp.

1090. *Mimas tilia* L.—Euroriental.—M: Caldelas. July–August. Gerez.—BB: Castelo Novo. June. Ribeira da Ocreza. July. S. Vicente. May.—E: Torres Vedras. April. At light.—Foodplant: *Tilia* sp.—f. *brunnea* Bartel.—M: Caldelas. August.

1091. *Smerinthus ocellata* L.—Euroriental.—M: Gerez. May. Only one specimen.—BB: S. Fiel.—Larva in June. Foodplant: *Salix cinerea* L.

1092. *Hæmorrhagia fuciformis* L. (*bombylifformis* O.).—Euro-Pacific.—M: Caldelas.—BB: Matta do Fundão. May.

1093. *Proserpinus proserpina* Pallas.—Euroriental.—BB: Matta do Fundão. June.

1094. *Macroglossum stellatarum* L.—Euroriental.—M: Caldelas. July–August. Gerez. Frequent. Guimarães. Vizela. May–June; October.—Common.—BL: Coimbra. Condeixa. August. Very common.—BB: S. Fiel. May–October. Serra da Estrêla. August.—E: Alfeite. Setúbal. According to Vieilledent, on wing during the entire year, even in winter, when it has a tendency to enter in houses. He found this species hovering around flowers even in rain. Torres Vedras.

1095. *Celerio euphorbiæ* L.—Euroriental.—BL: Coimbra. Condeixa. August. In great number.—E: Torres Vedras. August.—f. *grentzenbergi* Stgr.—E: Torres Vedras. July.

1096. *Celerio nicæa* Prun.—Ponto-Mediterranean.—E: Setúbal. September.

1097. *Celerio lineata livornica* Esp.—Tropico-Holarctic.—M: Caldelas. July–August. Rare.—BB: S. Fiel. May; July.—E: Setúbal. May.—Mendes writes that a larva which pupated on July 6 emerged on July 20.—Other larvæ in July–August. Foodplant: *Linaria sparteæ*.

1098. *Pergesa porcellus* L.—Euroriental.—M: Caldelas. July. Gerez. Only one specimen from each of the above localities.

1099. *Pergesa elpenor* L.—Euro-Pacific.—M: Caldelas. August. Vizela. June. Only one specimen from each of the above localities.—BL: Condeixa. August. Very common.—E: Torres Vedras. August.

1100. *Hippotion celerio* L.—Euro-Pacific.—BL: Condeixa. August. Abundant.—BB: S. Fiel. October.—E: Serra da Arrábida. Setúbal. June; September–October.

HESPERIIDÆ

1101. *Carcharodus alcea* Esp.—Euroriental.—M: Caldelas. August. Gerez. May. Frequent. Porto.—T: Pedras Salgadas.—BL: Condeixa.—BB: Casal da Serra. Covilhã. September. Gouveia. Matta do Fundão. August. Sabugueiro. June.—E: Alcácer do Sal. Estoril. August. Near to *tripolina* Vrtý: the contrast between the dark bands and the pale reddish ground-color is more conspicuous. Paço d'Arcos. February. Santa Cruz. April. Setúbal. June–July.

1102. *Carcharodus baticus* Rmb.—Western Mediterranean.—BB: Serra da Estrêla, 1500 m.—E: Alcácer do Sal.

1103. *Hesperia sao* Hbn. and gen. æst. *eucrate* O.—European.—M: Gerez. May. Rare.—T: Pedras Salgadas.—BA: Aregos.—BL: Bussaco. Coimbra. Condeixa. July–August.—BB: Covilhã. Manteigas. August. Senhora da Orada. May. Serra da Estrêla. August.—E: Alcácer do Sal. Setúbal. July–August. Sintra. Late April. Torres Vedras. April.

1104. *Hesperia proto* Esp.—Mediterranean.—E: Alcácer do Sal. Setúbal. July.—Ale: Almodóvar.—Alg: Silves. May.

1105. *Hesperia alveus* Hbn.—Euro-Pacific.—M: Caldelas. July–August. Gerez. May–August. Frequent. Porto.—BL: Coimbra.

1106. *Hesperia onopordi* Rbr.—Western Mediterranean.—BB: S. Fiel.—E: Alcácer do Sal.—Alg: Silves. May.

1107. *Hesperia fritillum* Hbn.—Iberian.—M: Caldelas. August.

1108. *Hesperia malvoides* Elwes.—Western Mediterranean.—M: Caldelas. July–August. Gerez. Porto.—T: Pedras Salgadas.—E: Grandola.—Alg: Serra de Monchique.

1109. *Thanaos tages cervantes* Grasl.—Euro-Pacific.—M: Gerez. May. This species, which is common in many European countries, has been recorded from Portugal only by Silva Cruz who found one specimen, which he has figured (1936, Brotéria, Série trimestral, Ciências naturais, 5(32), p. 80). There is no doubt as to the identification. This species was found in Spain in Andalusia by Ribbe.

1110. *Adopæa lineola* O.—Euro-Pacific.—T: Vila Real. June.—BL: Coimbra. June. Pampilhosa.—BB: S. Fiel. June.—E: Alcácer do Sal.—Ale: Beja.

1111. *Adopæa acteon* Rott.—Euroriental.—M: Caldelas. August. Only one specimen. Gerez. July. Common. Guimarães. Vizela. June.—BB: Covilhã. S. Fiel. July.—E: Alcácer do Sal. Setúbal. July; September. Torres Vedras. July.

1112. *Adopæa thamas* Hufn.—Euroriental.—BL: Coimbra.—BB: Covilhã. Gouveia. S. Fiel. May.—E: Alcácer do Sal. Estoril. June–July. Leiria. Oeiras. June. Setúbal. April–May. Torres Vedras. July.

1113. *Augiades sylvanus* Esp.—Euroriental.—M: Caldelas. July–August. Gerez. May. Frequent. Porto. Vizela. June.—BB: S. Fiel. June.

1114. *Erynnis comma* L.—Euro-Pacific.—M: Caldelas. July–August. Very common. Gerez. May. Frequent. Porto. Vizela. August.—BL: Lousã.—BB: Covilhã. Matta do Fundão. Serra da Estrêla. August. Serra da Guardunha. August.

LYCÆNIDÆ

1115. *Laosopsis roboris lusitanica* Stgr. (1891, Iris, 4, p. 232.)—Western Mediterranean.—BA: Aregos.—BL: Coimbra. Pampilhosa. Silva Escura. Soure.—BB: Alpedrinha. Ponte de Morcellos. June. Portas de Ródam. June. In chestnut forests. S. Fiel.—E: Alcácer do Sal. Lisboa (type locality). June. Setúbal. May. Torres Vedras. June.—Alg: (mentioned in original description, without more definite locality).

1116. *Callophrys rubi* L. and f. *fervida* Stgr.—Euroriental.—M: Gerez. May. Vizela. May.—BB: Senhora da Orada. April–May.—Alcácer do Sal. Setúbal. February–April. Sintra. April. Common. Torres Vedras. April. Val de Rosal. April. Abun-

dant.—Alg: recorded by Mendes, without more definite locality.—*f. inferopunctata* Tutt.—E: Estoril. March-April.

1117. *Callophrys avis* Chapm. (1909, Entom. Record, 21, p. 130).—Western Mediterranean.—M: Gerez. May.—BA: Ucanha.—BL: Bussaco.—See: Chapman in Transact. Entom. Soc. London, 1910, p. 85–106, with 30 pl., Entom. Record, 1910, 22, p. 245–248 and Mendes in Brotéria, Série zoológica, 1910, 9, p. 67 and p. 172.

1118. *Thecla spini* Schiff.—Euro-Pacific.—M: Gerez. July. Porto.—BB: Portas de Ródam. May.—E: Alcácer do Sal. May. Setúbal. May.—Alg: Silves. May.—*f. lynceus* Hbn.—BB: Portas de Ródam. May.

1119. *Thecla ilicis* Esp.—Euroriental.—M: Gerez. July. Porto.—T: Pedras Salgadas.—BL: Coimbra.—BB: Matta do Fundão. June–July. Monte de S. José.—E: Leiria. Setúbal. May–June.—*f. esculi* Hbn.—BB: Matta do Fundão. June–July. Monte de S. José. Serra da Estrêla.—E: Alcácer do Sal. Torres Vedras. June–July.—Alg: Silves. May.—*f. cerri* Hbn.—BB: Matta do Fundão. June–July. Monte de S. José.—*f. mauretanica* Stgr.—E: Torres Vedras.

1120. *Zephyrus quercus* L.—Euroriental.—BB: Monte de S. José. Quinta dos Fornos. June–July.—E: Setúbal. May–June.

1121. *Thestor ballus* F.—Western Mediterranean.—BA: Lamego. Ucanha.—BL: Coimbra.—BB: S. Fiel. Late February. S. Vicente. March–April.—E: Paço d'Arcos. March. Setúbal. March–April. Sintra. April.—Alg: Portimão.

1122. *Chrysophanus hippothoë* L.—European.—M?: Caramulo.—I could not find this locality on any map. It may be located in Minho. This species has been recorded only by Biel, who was in correspondence with Staudinger and whose identifications are generally reliable.

1123. *Chrysophanus alciphron gordius* Sulzer.—Euroriental.—M: Caldelas. July. Gerez. July. Frequent. Porto. Vizela. June.—T: Vila Real. June.—BL: Bussaco. Coimbra.—BB: Covilhã. Gouveia. Matta do Fundão. June–July. Serra da Estrêla. August. Common.

1124. *Chrysophanus phlaeas* L.—Euro-Pacific.—M: Caldelas. July–August. Common. Gerez. May; July. Guimarães. May.

Vizela. June; August.—BL: Coimbra. Condeixa. August.—BB: S. Fiel. From March on. Serra da Estrêla. August.—E: Estoril. July; October. S. Amaro. June. Setúbal. March; July. Sintra. April–May. Torres Vedras. March–April; July.—f. *cæruleopunctatus* Stgr.—BB: S. Fiel.—E: Torres Vedras. July.

1125. *Chrysophanus dorilis* Hufn.—Euroriental.—M: Caldelas. August. Abundant. Gerez. May. Rare. Guimarães. Porto. Vizela. July.—T: Pedras Salgadas.

1126. *Polyommatus baticus* L.—Tropical.—M: Caldelas. August. Common. Gerez. May. Guimarães. Vizela. June.—BL: Condeixa. August.—BB: Ceia. June. S. Fiel. July–October.—E: Estoril. August. Rare. Oeiras. June. Rare. Setúbal. May–June. Torres Vedras. July–November.

1127. *Tarucus telicanus* Lang.—Mediterranean.—M: Caldelas. July. Common. Gerez. May–July. Very common. Guimarães. Vizela. June. August.—BL: Coimbra. Condeixa. August. Luso. August.—BB: Ceia. June. S. Fiel. June–August. Serra da Estrêla. August.—E: Estoril. October. Frequent. Setúbal. April–June. Torres Vedras. July. November.—Alg: recorded only by Querci without more definite locality.

1128. *Zizera lysimon* Hbn.—Tropical.—M: Porto.—BL: Pampilhosa.—BB: Covilhã. June–end of October. Gouveia. Ribeira da Ocreza. August.—E: Alcácer do Sal. Batalha. August. Leiria. August. Santa Cruz. April; August. Setúbal. July–September. Torres Vedras. July.—Alg: Portimão.

1129. *Zizera minima* Fuessly.—Euro-Pacific.—T: Bragança? Recorded by Wattison, whose identification is rather doubtful. The description which he gives fits fairly well to the following species.—BB: Matta do Fundão. April.—E: Setúbal. April. July–August. Torres Vedras. May.

1130. *Zizera lorquini* H.S.—Western Mediterranean.—E: Oeiras. May. Sintra. May. The above records refer to specimens captured by myself. I did not find any records in the literature concerning the occurrence in Portugal of this species, except the doubtful record given under the preceding species. Mendes writes (1915, Brotéria, Série zoológica, 13, p. 60) that he recorded this species from Salamanca, Spain, only and to his

knowledge it has never been found anywhere else on the Iberian Peninsula. It is surprising that even in a such well-studied family as the *Lycænidae* there are species not recorded before from Portugal.

1131. *Lycæna argus* L. (*agon* Schiff.).—Euro-Pacific.—M: Caldelas. August. Rare. Gerez. May; August. Guimarães. May–June. Porto. Vizela. June.—BL: Coimbra. Luso. August.—BB: Ceia. June. Covilhã. Gouveia. Ponte de Morcellos. June. Senhora da Orada. Serra da Estrêla. May; July–August.—E: Torres Vedras. June.—f. *hypochiona* Rbr.—BB: Matta do Fundão.—f. *casaiacus* Chapm. (1907, *Transact. Entom. Soc. London*, p. 158, Pl. 5, figs. 16, 17).—E: Torres Vedras.

1132. *Lycæna baton panoptes* Hbn.—Euro-oriental.—M: Caldelas. August. Porto. Pousada.—T: Pedras Salgadas.—BL: Sobrado de Paiva.—E: Alcácer do Sal. April. Only one specimen, found among numerous *L. abencerragus* Pierret. Setúbal. April–May. Val de Rosal. April.

1133. *Lycæna abencerragus* Pierret.—Mediterranean.—BB: Serra da Estrêla. June.—E: Alcácer do Sal. April.—Alg: recorded by Elwes without definite locality.

1134. *Lycæna atrarche calida* Bell.—Euro-Pacific.—M: Caldelas. July–August. Very abundant. Gerez. May; August. Frequent. Guimarães. Vizela. June.—BL: Condeixa. September.—BB: S. Fiel. Serra da Estrêla. August.—E: Alcobaça. August. Aljubarrota. August. Estoril. July–August. Oeiras. June; August; September. Common. Setúbal. From March on. Torres Vedras. July. Val de Rosal. April.

1135. *Lycæna icarus* Rott. and f. *celina* Aust.—Euro-Pacific.—M: Caldelas. July–August. Common. Gerez. May. Common. Guimarães. July. Porto. Vizela. June; August.—BB: Gouveia. S. Fiel. July. Common. Serra da Estrêla. August.—E: Alcobaça. August. Capuchos. August. Estoril. August. Oeiras. September. Common. Setúbal. April–May. Sintra. Late April. Torres Vedras. Val de Rosal. April.—f. *cærulea* Fuchs.—M: Guimarães. Vizela. June.—BB: Matta do Fundão. July.—E: Val de Rosal. April.—f. *cærulescens* Wheel.—E: Oeiras. September. Praia das Maças.—f. *icarinus* Scriba.—E: Estoril. May; August. Oeiras. June. Sintra. April.

1136. *Lycæna thersites* Cantener (see: Chapman, Transact. Entom. Soc. London, 1912, p. 662).—Euroriental.—E: Belém. March.—Alg: Serra de Monchique.

1137. *Lycæna escheri* Hbn.—Mediterranean.—M: Guimarães. April.

1138. *Lycæna bellargus* Rott.—Euroriental.—BA: Aregos.—BL: Coimbra. Pampilhosa.—BB: Portas de Ródam. May.—E: Alcácer do Sal. Setúbal. June.—Alg: Alferce. May. Serra de Monchique.—f. *punctifera* Obth.—E: Torres Vedras. June.

1139. *Lycæna semiargus* Rott.—Euro-Pacific.—BA: Ucanha. May.—BB: S. Romão. June.

1140. *Lycæna cyllarus* Rott.—Euro-Pacific.—T: Pedras Salgadas. May. Rare.

1141. *Lycæna melanops* Bsd.—Western Mediterranean.—M: Caldelas. Rare. Gerez. May. Frequent. Guimarães. April. Pôrto. Vizela. June.—T: Vila Real. June.—BL: Coimbra.—BB: Covilhã. Gouveia. Ribeira d'Alpreada. May.—E: Setúbal. May.

1142. *Cyaniris argiolus* L. and gen. æst. *parvipuncta* Fuchs.—Euro-Pacific.—M: Caldelas. Very abundant. Gerez. July. Frequent. Guimarães. Vizela. July.—BL: Condeixa. August.—BB: Covilhã. S. Fiel. April; July–August.—E: Setúbal. February–April; July–September. Sintra. April. Common. Torres Vedras. July.

ERYCINIDÆ

1143. *Libythea celtis* Fuessly.—Mediterranean.—M: Caldelas. July. Abundant on humid ground. Guimarães.—BL: Coimbra.

1144. *Nemeobius lucina* L.—European.—M: Gerez. May. Rare.

NYMPHALIDÆ

1145. *Apatura iris* L.—Euroriental.—M: Felgueiras. Gerez. July–August. Rare.

1146. *Apatura ilia* Schiff.—European.—M: Caldelas. July. Only one specimen. Gerez. July–August. Rare. Guimarães. August. Taipas.—f. *clytie* Schiff.—M: Guimarães.—f. *lusitânica* Stichel.—M: Pôrto (type locality).

1147. *Charaxes jasius* L.—Mediterranean.—M: Caldelas. Common. Gerez. August. Common.—E: Alcácer do Sal. Louriçal.

October. Setúbal. August–October.—Foodplant: *Arbutus unedo* L.

1148. *Limenitis camilla* Schiff.—European.—M: Gerez. Guimarães. Vizela. June. Rare.—BB: Covilhã. June–August. Matta do Fundão. Val de Prazeres.

1149. *Limenitis rivularis* Scop.—Euro-oriental.—M: Caldelas. July. Only one specimen. Gerez. Guimarães. Vizela. June. Rare.—T: Pedras Salgadas.—BL: Coimbra.—BB: Covilhã. Matta do Fundão. Val de Prazeres.

1150. *Pyrameis atalanta* L.—Holarctic.—M: Caldelas. Common. Gerez. May–September. Frequent. Guimarães. Vizela. June; October.—BL: Condeixa. September.—BB: Covilhã. S. Fiel. Practically during the entire year.—E: Estoril. May. Small specimen. Wingspread: 43 mm. Paço d'Arcos. Setúbal. Torres Vedras. April; October.—Larva in May; August; October. Foodplant: *Urtica* sp.

1151. *Pyrameis cardui* L.—Tropico-Holarctic.—M: Caldelas. Abundant. Gerez. July–August. Guimarães. Vizela. July.—BL: Condeixa. July–August.—BB: S. Fiel. During the entire year according to Mendes. No migration observed.—E: Estoril. March; November. Paço d'Arcos. February. Santa Cruz. April; June; August. Setúbal.—Larva in October–November. Foodplants: *Malva* sp. and *Urtica* sp.—ab. *priameis* Schultz.—E: Oeiras. May.

1152. *Vanessa io* L.—Euro-Pacific.—M: Gerez.—T: Pedras Salgadas.—BA: Aregos. Ucanha.—BB: Guarda. Matta do Fundão. June. Only one specimen. Serra da Estrêla.

1153. *Vanessa urticae* L.—Euro-Pacific.—T: Bragança.—BL: Bussaco. Coimbra.—BB: Gouveia. Guarda. Manteigas. Nave de S. Antonio. Senhora do Destêrro. Serra da Estrêla. July–August. Very common.

1154. *Vanessa polychloros* L.—Euro-oriental.—M: May; July–August. Guimarães. June. Pôrto.—T: Pedras Salgadas.—BA: Aregos.—BL: Coimbra.—BB: S. Fiel. March; July.—E: Setúbal. March–April; October. Tapada da Ajuda. Torres Vedras. June.

1155. *Vanessa antiopa* L.—Holarctic.—M: Gerez. May; August. Recarei.—T: Pedras Salgadas.—BL: Coimbra.

1156. *Polygonia c-album* L.—Euro-Pacific.—M: Caldelas. August. Abundant. Gerez. July. Guimarães. Matozinhos. S. Tirso. Vizela. June.—T: Pedras Salgadas.—BA: Aregos.—BL: Coimbra. June. Lousã.—BB: Gouveia. S. Fiel. March; July–August.—f. *pallidior* Tutt.—M: Caldelas. August.

1157. *Araschnia levanã* L. and gen. æst. et aut. *prorsa* L.—Euro-Pacific.—Wattison states that specimens of Portuguese origin are in the Museum of the University of Coimbra. No other records.

1158. *Melitæa aurinia iberica* Obth.—Euro-Pacific.—M: Caldelas. July. Abundant. Gerez. May–September. Abundant. Guimarães. May. Vizela. June.—BB: Covilhã. Matta do Fundão. April–June. Senhora da Orada.—E: Alcácer do Sal. Setúbal. March–April. Sintra. Torres Vedras. April.—Larva until April. Foodplant: *Lonicera* sp.—f. *desfontainii* God.—BB: Ceia. June. S. Romão. June.—E: Sintra. April.—Alg: Monchique. May.

1159. *Melitæa cinxia* L.—Euro-oriental.—T: Pedras Salgadas. May.

1160. *Melitæa atherie* Geyer.—Western Mediterranean.—E: Val de Rosal. April.

1161. *Melitæa phæbe occitanica* Stgr.—Euro-Pacific.—M: Caldelas. August. Very abundant. Gerez. May. Vizela. June.—T: Vila Real. June.—BB: Covilhã.—E: Grândola. Louriçal. May.

1162. *Melitæa didyma* O. and f. *occidentalis* Stgr.—Euro-Pacific.—T: Bragança. Pedras Salgadas. Vila Real. June.—BA: Ucanha.—BL: Coimbra.—BB: Casal da Serra. Covilhã. Gouveia. Matta do Fundão. May; July–August. Ponte de Morcellos. June. S. Vicente. Serra da Estrêla. August.—E: Alcácer do Sal.—f. *meridionalis* Stgr.—E: Setúbal. May; August–September.

1163. *Melitæa trivialis* Schiff.—Ponto-Mediterranean.—T: Pedras Salgadas.—BA: Ucanha.—BL: Coimbra.—BB: Covilhã. Gouveia. Matta do Fundão. May.

1164. *Melitæa athalia helvetica* Rühl.—Euro-Pacific.—BB: Covilhã. June–early July.

1165. *Melitæa dejone rosinae* Rebel. (1910-1911, Ann. K. K. Naturhist. Hofmuseum. Wien, 24, p. 375-378, 1 pl.).—Western Mediterranean.—M: Caldelas. June-August. Very abundant. Gerez. May. Common. Guimarães. Vizela. May.—BB: Covilhã. Matta do Fundão. April-June; July-August. Senhora da Orada. May.—E: Oeiras. May-June. Sintra (type locality). Early June. The imago of the second brood is larger than that of the first brood.—Larva until April. Foodplant: *Antirrhinum* sp.

1166. *Melitæa parthenie* Brkh.—European.—M: Caldelas. August. Vizela. July.—BL: Coimbra.—BB: Gouveia.—Larva in June. Foodplant: *Antirrhinum majus*.

1167. *Argynnis selene* Schiff.—Euro-Pacific.—M: Caldelas. August. Rare. Gerez. May; August. Guimarães.—BB: Gouveia.

1168. *Argynnis euprosyne* L.—Holarctic.—M: Gerez. May. Guimarães. Ruivães.—BL: Coimbra.—BB: Gouveia.

1169. *Argynnis lathonia* L.—Euroriental.—M: Caldelas. Rare. Gerez. May; August. Guimarães.—BB: Covilhã. March. Matta do Fundão. July-August. S. Fiel. Serra da Estrêla. August-September.

1170. *Argynnis aglaja* L.—Euro-Pacific.—M: Gerez. August.—BL: Coimbra.

1171. *Argynnis niobe* L. and f. *eris* Meig.—Euro-Pacific.—M: Gerez.—BA: Ucanha.—BB: Covilhã.

1172. *Argynnis adippe* L., f. *cleodoxa* O., f. *chlorodippe* H.S. and f. *cleodippe* Stgr.—Euro-Pacific.—M: Caldelas. July-August. Gerez. August. Guimarães. Pôrto.—T: Pedras Salgadas.—BL: Coimbra.—BB: Capinha. May. Covilhã. Gouveia. Matta do Fundão. June-July. S. Fiel. Serra da Estrêla.

1173. *Argynnis paphia* L.—Euro-Pacific.—M: Caldelas. July. Very abundant. Gerez. July-August. Guimarães. August. Pôrto. Vizela. June.—T: Pedras Salgadas.—BA: Arêgos.—BL: Coimbra.—BB: Gouveia.

1174. *Argynnis pandora* Schiff.—Mediterranean.—M: Caldelas. Common. Gerez. August. Pôrto.—T: Pedras Salgadas.—BA: Arêgos.—BL: Coimbra.—BB: Covilhã. Gouveia. Matta do Fundão. May-September. Serra da Estrêla. August. Imago frequently seen on *Carduus* sp.

SATYRIDÆ

— *Erebia evias* God.—Alpine.—M: Gerez. Recorded by Tavares, who found one specimen only, which was identified by Mendes. This would be the only record of the occurrence in Portugal of a representative of the large genus *Erebia*. I consider this record as doubtful. Most species of *Erebia* are found in large numbers. Therefore it is surprising that only one specimen has been found and no new records exist. Should this record be confirmed, it will be of great interest as proof of the occurrence in Portugal of Alpine species.

1175. *Melanargia lachesis* Hbn.—Western Mediterranean.—M: Caldelas. June–August. Gerez. July–August. Guimarães. Pôrto. Vizela. July.—T: Vila Real.—BL: Oliveira d’Azemeis.—BB: Covilhã. June–September. Matta do Fundão. June. Ponte de Morcellos. June.—E: Oeiras. June. Common. Sintra. Torres Vedras. June. Frequent.—f. *canigulensis* Obth.—M: Caldelas. July–August.—f. *geresiana* Ferreira de Sousa (1929, Mem. e Estudos do Museu Zoológ. da Univ. de Coimbra, Série 1, No. 31, p. 1–2, 1 fig.—M: Caldelas (type locality). June–July.

1176. *Melanargia japygia cleanthe* Bsd.—Euroriental.—M: Marco de Canaveses.—BB: Serra da Estrêla near Gouveia. August.

1177. *Melanargia syllius* Hbst.—Western Mediterranean.—M: Gerez.—BL: Coimbra. Pampilhosa.—BB: Covilhã. Mação.—E: Alcácer do Sal. Campolide. Estoril. April–May; July. Oeiras. May–June. Queluz. Setúbal. April–May. Sintra. Torres Vedras. June. Val de Rosal. April.

1178. *Melanargia ines* Hfsg.—Western Mediterranean.—M: Gerez. May.—T: Vila Real.—BL: Coimbra. June.—BB: Matta do Fundão. Portas de Ródam. May. Ribeira d’Alpreada.—E: Alcácer do Sal. Leiria. Pombal. S. Amaro. May.—Ale: Evora.—Alg: Monchique. May.

1179. *Satyrus circe* F.—Euroriental.—T: Bragança. Pedras Salgadas.—BL: Lousã.—BB: Castelo Branco. Castelo Novo. Covilhã. July–August. Gouveia. Matta do Fundão. Quinta dos Carvalhos.

1180. *Satyrus hermione* L.—European.—BB: Serra da Estrêla. August–September.

1181. *Satyrus alcyone* Schiff.—Euroriental.—M: Guimarães.—BB: Matta do Fundão. July. Serra da Estrêla.—f. *vandalusica* Obth.—M: Gerez. July–September. Very common in pine forests.

1182. *Satyrus semele* L.—Euroriental.—M: Gerez. July–September. Common. Guimarães. June. Salamonde. June. Vizela. June.—BB: Covilhã. S. Fiel. July–August. In the mountains on rocks, in the woods on tree trunks.—f. *ocellarum* Mattozo (1884–1885, Journal de Scienc. Mathem., Physic. e Naturaes de Lisbôa, 10).—BB: Serra da Estrêla. August.

1183. *Satyrus arethusa* Esp.—Ponto-Mediterranean.—M: Gerez.—BA: Ueanha near Lamego.—f. *dentata* Stgr.—M: Gerez. July–August. Common.

1184. *Satyrus statilinus allionia* F. and f. *cæca* Hannemann.—European.—M: Caldelas. August. Rare. Gerez. July–September. Common in pine forests. Guimarães. Vizela. August.—BL: Condeixa. August.—BB: Covilhã. S. Fiel. July–August. Serra da Estrêla. August.—E: Alcobaça. August. Batalha. August. Estoril. July–August. Leiria. August. Oeiras. August. Santa Cruz. August. Setúbal. July–September.

1185. *Satyrus fidia* L.—Western Mediterranean.—M: Gerez. July–September. Common in pine forests.—BL: Condeixa. August.—BB: Covilhã. Monsanto. Sobral do Campo. July–September.—E: Alcobaça. August. Estoril. July–August. Leiria. August. Lourçal. Oeiras. August. At the same places where the preceding species flies, but less frequent. Setúbal. July–August. Torres Vedras. Middle of July. Early October.

1186. *Satyrus actæa monteiroi* Mendes (1910, Brotéria, Série zoológica, 9, p. 63, Pl. 2, Fig. 2, 5–12). f. *podarce* O., f. *mattozi* Monteiro (1882, Jornal de Ciencias Mathem., Physic. e Natur. de Lisbôa, 9, No. 34, p. 107), and f. ♀ *herminia* Mendes (1910, Brotéria, Série zoológica, 9, p. 65, Pl. 2, Figs. 9–11).—Euroriental.—BB: Serra da Estrêla, 1200–1600 m. (type locality of *monteiroi*, *mattozi* and ♀ *herminia*). The form occurring in Portugal is a well-defined geographical race. Any of the Portuguese specimens can be easily distinguished from typical *actæa* Esp., particularly by the smaller size (wingspread 40–47 mm.) and the underside of the hindwings. The median white band not well developed.

Numerous small white and fuscous spots. Subterminal white band wide and conspicuous. On a few specimens the white marks almost obsolete.—The names *podarce* O., *mattozi* Monteiro and ♀ *herminia* Mendes designate only minor individual aberrations of *monteiroi* Mendes. It may be of interest to note that Serra da Estrêla is the only known locality in Portugal where this species occurs. This may explain that a local form has developed, interbreeding with populations from nearby localities being impossible.

1187. *Pararge aegeria* L.—Euroriental.—M: Caldelas. July–August. Very common. Gerez. May–September. Very common. Guimarães. February; April; June; November. Vizela. July.—BL: Coimbra. June. Condeixa. August.—BB: S. Fiel.—E: Estoril. February–March; May. Frequent. Leiria. August. Setúbal. March. Sintra. March–April. Common. Torres Vedras. April–July. Common.

1188. *Pararge megera* L.—Euroriental.—M: Caldelas. August. Abundant. Gerez. July. Rare. Guimarães. April. Vizela. July.—BL: Condeixa. August.—BB: Sabugueiro. June. S. Fiel. April–May; July. Serra da Estrêla, WSW slopes. August.—E: Batalha. August. Estoril. February–March; July–August. Leiria. August. Paço d'Arcos. January. S. Amaro. May. Setúbal. April–May. Sintra. April. Common. Torres Vedras. June–July.

1189. *Pararge mæra* L.—Euroriental.—M: Caldelas. Not as frequent as the preceding species. Gerez. July. Rare. Vizela. May.—BB: Covilhã. S. Fiel. May. Serra da Estrêla. August.—E: Grândola. Setúbal.—f. *adrasta* Hbn.—M: Caldelas. July.—BB: S. Fiel. July–August.

1190. *Epinephele passiphaë* Esp.—Western Mediterranean.—BL: Coimbra. June. Pampilhosa.—BB: Covilhã. Matta do Fundão. June–July.—E: Alcácer do Sal. Estoril. April–May. Leiria. Oeiras. May–June. Pombal. Setúbal. June–July. Torres Vedras. June–July.—Alg: Monchique. May.—f. *dosmanchas* Rbb.—E: Estoril. May. Oeiras. May.

1191. *Epinephele ida* Esp.—Mediterranean.—M: Caldelas. July–August. Common. Gerez. July–September. Very common. Guimarães. Vizela. June–July.—BL: Condeixa. September.—BB: Covilhã. Ponte de Moreellos. June. S. Fiel.

June–August.—E: Alcácer do Sal. Alcobaça. August. Estoril. June–August. I have repeatedly observed that the ♂ emerges earlier than the ♀. In 1941 I captured a large series and came to the following conclusion: both sexes were found from June 15 on, but, whereas the last ♂ was captured on July 20, there were many ♀♀ to be found much later, until August 17. This means that practically during an entire month numerous ♀♀ fly when not a single ♂ is on the wing. Leiria. August. Oeiras. June. Pé da Serra. July. Setúbal. April–August. Torres Vedras. June–July.—f. *dosojos* Rbb.—E: Estoril. June.

1192. *Epinephele tithonus* L.—Euro-oriental.—M: Caldelas. July–August. Very abundant. Gerez. July–September. Frequent. Vizela. June.—BB: Covilhã. S. Fiel. June–August. Serra da Estrêla, WSW slopes. August.—E: Pé da Serra. July. Rare. Setúbal. June–August. Torres Vedras. June–July.

1193. *Epinephele jurtina* L., f. *hispulla* Hbn. and f. *fortunata* Alph.—Euro-oriental.—M: Caldelas. August. Very abundant. Gerez. July–September. Common. Guimarães. Vizela. May–June.—BL: Condeixa. August.—BB: Ponte de Morcellos. June. S. Fiel. May–August. Serra da Estrêla. August.—E: Capuchos. August. Estoril. April; June; July–August. Oeiras. June; August–September. Pé da Serra. July. Praia das Maças. Setúbal. June–September. Torres Vedras. End of May–July.—Alg: Silves. May.—The mountain race from Serra da Estrêla forms a transition between typical *jurtina* L. and *hispulla* Hbn., whereas the form of the plain is nearer to *fortunata* Alph.

1194. *Epinephele lycaon* Rott.—Euro-Pacific.—BB: Covilhã. Gouveia. August. Serra da Estrêla. Serra da Guardunha. August.

1195. *Epinephele lupinus* Costa. (*rhamnusia* Freyer).—Mediterranean.—BB: Covilhã.—E: Alcácer do Sal.

1196. *Cæonympha arcania* L.—Euro-oriental.—M: Gerez. August. Frequent.

1197. *Cæonympha dorus* Esp.—Western Mediterranean.—M: Gerez. May–September. Very common. Pôrto. Vizela. July.—BL: Condeixa. August–September.—BB: Matta do Fundão. June–July. Serra da Estrêla, 700–1000 m. August. Serra da Guardunha.—E: Setúbal. June–July. Torres Vedras. July.—

f. *bieli* Stgr.—M: Caldelas. Common. Gerez.—BL: Sobrado de Paiva.—BB: Covilhã. Matta do Fundão. Serra da Estrêla, 700–1000 m. Serra da Guardunha. July.—*bieli* Stgr. is a race distributed over northern and central Portugal only, whereas *dorus* Esp., in its nomotypical form, occurs also in the southern part of Portugal. In BB. the two forms can be seen flying together.

1198. *Cænonympha pamphilus* L.—Euroriental.—M: Caldelas. July–August. Common. Gerez. May–September. Guimarães. April. Vizela. May–June.—BB: S. Fiel. From March on.—E: Setúbal. March–April. July. Torres Vedras. July.—Ale: Almodóvar. May.—Alg: Monchique. May.—f. *marginata* Rühl.—BB: S. Fiel. From March on.—E: Setúbal. June.—f. *lyllus* Esp.—M: Gerez.—T: Pedras Salgadas.—BL: Condeixa. August. Sobrado de Paiva.—BB: Covilhã. June–end of October. Serra da Estrêla.—E: Alcácer do Sal. Alcobaça. August.—Alg: Portimão. Serra de Monchique.

DANAIDÆ

1199. *Danaïis plexippus* L.—Tropico-Holarctic.—M: Miramar. October 2, 1932. Only one ♀. Identified and figured by Maria Amélia da Cruz, in Brotéria, Série trimestral, Ciências naturais, 1936, 5(32), p. 81. This is the only reliable record of capture in Portugal of this species. In any case it is extremely rare that it reaches, during its migrations, Portuguese territory. I have never seen it.

PIERIDÆ

1200. *Aporia crataegi* L.—Euro-Pacific.—M: Gerez. May. Common.—T: Pedras Salgadas.—BB: Mação. May.—Food-plants: *Cratægus* sp. and fruit trees.

1201. *Pieris brassicae* L., gen. vern. *chariclea* Steph. and gen. æst. *lepidii* Röber.—Euroriental.—M: Caldelas. June–August. Abundant. Gerez. August. Guimarães. Vizela. July.—BB: S. Fiel. February–March.—E: Alcácer do Sal. Estoril. February. Lisboa. March; October–November. Paço d'Arcos. Setúbal. Sintra. April. Torres Vedras. April; July; November. Val de Rosal. April. Abundant.—Alg: Silves. May.—f. *venata* Verity.—BB: S. Fiel.—This species is on the wing the whole year; seen commonly even in winter on sunny days. There is hardly

any difference between the early spring brood of February–March and the late fall form of October–November. Both agree with *chariclea* Steph.—Pupates often on doors and windows. Food-plant: cabbage. Injurious.

1202. *Pieris rapæ* L.—Holarctic.—M: Caldelas. June–July. Very common. Gerez. May–September. Guimarães. Vizela. July.—Condeixa. July–September.—BB: Matta do Fundão (1 specimen has only 50 mm. wingspread). S. Fiel. Serra da Estrêla. August.—E: Estoril. July–August. Leiria. August. S. Amaro. May–June. Setúbal. Torres Vedras. July. Val de Rosal.—f. *leucotera* Steph.—M: Guimarães.—BB: S. Fiel. February. Serra da Guardunha. February–March.—gen. vern. *metra* Steph. and f. *debilis* Alph.—BB: S. Fiel.—E: Lisboa. March.—f. *immaculata* Ckll.—M: Gerez.—gen. aut. *ultima* Rocci.—E: Lisboa. October–November.—This form hardly differs from *metra* Steph. The same as in *brassicæ* L., here too the early spring and late fall forms are almost alike.—f. *flavida* Petersen is mentioned by Wattison without more definite locality.

1203. *Pieris napi* L., gen. æst. *napæ* Esp., and f. *immaculata* Strand.—Holarctic.—M: Caldelas. June–August. Gerez. May. Abundant. Guimarães. April. Vizela. July.—BB: Alpedrinha. February–April; May–June. Ceia. June. Covilhã. Matta do Fundão. February–April; May–June. S. Fiel. June.—E: Sintra. April.—f. *lusitanica* Oberth.—M: Caldelas. June–July. Very abundant.—f. *trircummaculata* Ferreira de Sousa (1929, Memor. e Estudos do Museu zool. da Univ. de Coimbra, Série 1, No. 31, p. 2, Fig. 2). This is an insignificant aberration. No locality given in the original description.

1204. *Leucochloë daphidice* L.—Euroriental.—M: Caldelas. July–August. Gerez. May–September. Common. Guimarães. Vizela. May–June. Frequent.—BL: Coimbra. June. Condeixa. June–August.—BB: Matta do Fundão. S. Fiel. From the end of May on. Serra da Estrêla. August. Serra da Guardunha. September.—E: Batalha. August. Setúbal. July–September. Torres Vedras. July–August.—gen. vern. *bellidice* O.—M: Gerez. Pousada.—T: Pedras Salgadas.—BL: Coimbra. Pampilhosa. S. Fiel. February–March. Sobrado de Paiva.—Mendes points out (1912, Brotéria, Série zoológica, 10, p. 166) the simi-

larity between the spring form *bellidice* O. and a specimen captured at S. Fiel in September.

1205. *Euchloë belemia* Esp. and gen. æst. *glauce* Hbn.—Mediterranean.—BL: Coimbra.—BB: Covilhã. March. Ribeira da Ocreza. February–March; May. S. Fiel (wingspread 40 mm.).—E: Alcácer do Sal. Belem (type locality). Paço d'Arcos. S. Amaro. May. Setúbal. April–May.—Ale: Almodóvar. May.

1206. *Euchloë belia* Cr. and gen. æst. *ausonia* Hbn.—Euro-Pacific.—M: Gerez. May. Vizela.—T: Bragança. Pedras Salgadas.—BL: Coimbra. Pampilhosa. Sobrado de Paiva.—BB: Portas de Ródam. May. S. Fiel. March–April. Serra da Estrêla.—E: Abrantes. Alcácer do Sal. Paço d'Arcos. Setúbal. March–April.

1207. *Euchloë tagis* Hbn. and f. *lusitanica* Oberth. (Études Lépid., Comp. 3, p. 145).—Western Mediterranean.—E: Almada. Casilhas. Margens do Sado. Piedade near Lisboa (type locality). February–April. Serra da Arrábida near Setúbal. March–April. Serra de S. Luiz. Val de Rosal. April. This species is extremely local. All above localities are situated within a very small area. They are located near the southern bank of the Tagus river. Surprisingly enough it never crosses the river. No records are known of its occurrence from the north bank of the Tagus river. Vieilledent mentions that he never found this species at less than 300 m. altitude.

1208. *Anthocharis cardamines* L.—Euro-oriental.—M: Gerez. May. Rare.—T: Pedras Salgadas.—BL: Coimbra.—BB: Matta do Fundão. May. Senhora da Orada. May.—E: Arrabida. Oeiras. May. Setúbal. March–May. Sintra. April.

1209. *Anthocharis euphenoides* Stgr.—Western Mediterranean.—T: Pinhão. Régua.—BL: Coimbra.—BB: Guarda. Pinhel.—E: Serra da Arrábida near Setúbal. April.

1210. *Gonepteryx rhamni* L.—Euro-Pacific.—M: Caldelas. July. Rare. Gerez. August. Guimarães. April–June.—BB: Ceia. June. S. Fiel. March–April; July. Serra da Estrêla.—E: Setúbal. Sintra. April. Common. Torres Vedras. June.

1211. *Gonepteryx cleopatra* L.—Mediterranean.—BL: Coimbra. Condeixa. August–September. Figueira da Foz. Pampilhosa.—BB: Portas de Ródam. April–May. According to Mendes common at places where *Rhamnus alaternus* grows in

abundance. Serra da Estrêla.—E: Abrantes. Alcácer do Sal. Batalha. August. Estoril. June. Leiria. August. Paço d'Arcos. February. Setúbal. February–July. Sintra. April. Torres Vedras. June–July.—Alg: Silves. May.—f. *maderensis* Fldr.—BL: Coimbra. One ♂.—f. *italica* Gerh.—?M: Pôrto. Stefanelli (1903, Bull. Soc. Entom. Ital., 35, p. 82) states having received specimens from above locality from Staudinger. There is no other record that this species occurs in the northernmost province of M. Most probably Staudinger, who received most of his Portuguese material from Biel who lived in Pôrto, assumed that it was captured there, whereas in reality these specimens originate from a more southern locality.

1212. *Colias croceus* Fourcr. (*edusa* F.) and f. ♀ *helice* Hbn.—Euro-oriental.—M: Caldelas. July–August. Very abundant. Gerez. May–September. Common. Guimarães. May–June. Vizela. May–July.—BL: Coimbra. Condeixa. July–September.—BB: Ceia. June. Quinta da Anta. May. S. Fiel. March–September. Serra da Estrêla, up to the summit, according to Wattison. August.—E: Oeiras. June. Santa Cruz. April. Setúbal. March–October. Torres Vedras. June; end of July–August.—Alg: Monchique. May.

1213. *Lepidia sinapis* L., f. ♀ *erysimi* Bkh., f. *diniensis* Bsd. and gen. aest. *lathyri* Hbn.—Euro-Pacific.—M: Caldelas. June–August. Gerez. May–July. Guimarães. June. Vizela. May–June.—BL: Coimbra.—BB: Castelo Novo. July. Covilhã. Matta do Fundão. June. Ribeira da Ocreza. May; July–August. S. Fiel. March. Senhora da Orada. Serra da Estrêla. August.—E: Serra da Arrábida. July–August. Setúbal. April–May; July–August. Sintra. April. Torres Vedras. April; June–July.—One specimen from BB. has only 26 mm. wingspread.

PAPILIONIDÆ

1214. *Papilio machaon* L. and gen. aest. *sphyroides* Verity.—Holarctic.—M: Caldelas. August. Rare. Gerez. August–September. Guimarães. August. Pôrto. Vizela. August.—BL: Condeixa. August.—BB: S. Fiel. July–September. Serra da Estrêla. August.—E: Belem. February. Setúbal. March–April; July–October. Wingspread 72 to 89 mm. Torres Vedras. July. Val de Rosal. April.—Larva in June. Foodplants: *Fæ-*

niculum officinale, *Fœniculum vulgare*, *Fœniculum piperitum* H.C. and *Ruta angustifolia* Pers.

1215. *Papilio podalirius* L.—Euroriental.—gen. vern. *miegii* Th. Mieg.—Wingspread 55 to 65 mm.—M: Gerez. May. Guimarães. April.—BB: S. Fiel. April.—E: Alcácer do Sal. Santa Cruz. End of April. Setúbal. End of February–April. Sintra. April. Rare. Val de Rosal. April.—gen. æst. *feisthamelii* Dup.—Wingspread 65 to 82 mm.—M: Caldelas. Late July–August. Gerez. July–September. Guimarães. August. Vizela. June; August.—BL: Condeixa. August–September. Common.—BB: Covilhã. S. Fiel. July–September. Serra da Estrêla. August.—E: Setúbal. June–September. Sintra. July. Torres Vedras. July.—Foodplants: *Cratægus* sp. and *Prunus spinosa* L.

1216. *Thaisrumina* L.—Western Mediterranean.—Wingspread 48 to 58 mm.—M: Guimarães. May. Leça da Palmeira. Matozinhos. Valongo.—T: Pedras Salgadas.—BL: Coimbra. Lousã. Pampilhosa.—BB: Castelo Novo. Covilhã. March. Matta do Fundão. Portas do Ródam. S. Fiel. March–April. Senhora da Orada.—E: Estoril. Late February–March. Paço d'Areos. Pombal. Setúbal. March–April. Sintra. April. Tapada da Ajuda. Torres Vedras. End of March. Val de Rosal. April. The Portuguese race has the ground color darker than that of any other European race of which I know, a rather brownish yellow. Black and red spots well developed. Resembles f. *africana* Stichel.—f. *canteneri* Stgr.—M: Leça da Palmeira. Pôrto.—BB: S. Fiel, through breeding only.—E: Lisboa.—f. *tristis* Verity.—M: Matozinhos.—BB: S. Fiel.—Larva in May–June. Foodplant: *Aristolochia longa*.

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